Columbia University Bulletin

The Faculty of Medicine
Department of
Rehabilitation Medicine
Programs in
Physical Therapy and
Occupational Therapy
1985–1986



# To Communicate with the Programs

ADDRESS INQUIRIES TO:

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# Key to Course Listings

Each course number consists of capital letters followed by four digits and the term designation.

The capital letters indicate the curriculum for whose students the course is primarily offered:

- H.P. Health Professions (conjoint courses for students of Physical Therapy and Occupational Therapy)
- O.T. Occupational Therapy
- P.T. Physical Therapy

The level of the course is represented by *the first digit*:

- 6 Graduate course
- 8 Graduate course, advanced

The subject area of the course is represented by the second digit:

- 1 Biological sciences
- 2 Behavioral sciences
- 3 Medical conditions
- 4 Treatment modalities
- 5 Professional concepts and treatment
- 6 Clinical experience

# TERM DESIGNATIONS: X, Y, AND Z

An x following the course number indicates that the course meets in the autumn term; a y indicates the spring term; and a z indicates the Summer Session.

# Program in Physical Therapy

Physical therapy is the professional health science and service that contributes to the comprehensive care of physically disabled people. It is involved with the preservation of functional capacity, restoration of function, and the prevention of disability due to disease, injury, or loss of limb.

Physical therapy includes the analysis, administration, and interpretation of selected test procedures used to determine the need for physical therapy intervention. Among the specialized measures used to prevent or ameliorate physical disability are the therapeutic properties of electricity, sound, heat, cold, water, and compression, as well as the use of exercise with or without devices, joint mobilization, mechanical stimulation, massage, training in locomotion, and other functional activities.

The physical therapist collaborates with physicians, nurses, social workers, occupational therapists, psychologists, and others, and plays an important role in helping patients attain the highest possible degree of physical, mental, social, and occupational independence. Practice may encompass treatment of individual patients, planning and administering programs for groups of patients, or cooperative planning for community health programs. The physical therapist may work in hospitals, clinics, children's centers, private offices, rehabilitation centers, public schools, governmental or armed services, community health agencies, colleges or universities, or may be self-employed.

The physical therapist may assume responsibilities in the administration of a physical therapy department and the supervision of other physical therapists and supportive personnel, academic or clinical teaching, research, consultation services to agencies and members of other health professions,

coordination of physical therapy services with those of other professions, or administration in professional and supportive levels of education in physical therapy. The areas of service, research, and education assure physical therapists an interesting selection of positions in this country and in many other parts of the world.

The Columbia philosophy of physical therapy education is based on the belief that health care is the right of all. Further, persons under care as well as professionals who provide that care should be viewed as human beings with unique characteristics and behaviors. Thus a recurrent theme threads through the curriculum, recognizing that an individual's uniqueness is dependent on past experiences and many interactions in a complex society. Health care must consider the total needs of an individual, including physical and mental health, the present physical, family, or community environment, and a person's total physical, psychological, social, and cultural development.

The student in the program of study at Columbia is expected to have a broad background in general education, including knowledge of the fundamental principles of the social, biological, and physical sciences. This program is based upon work done for the bachelor's degree at an accredited college or university, including the courses required for admission. The professional curriculum is designed to be flexible with alternate learning approaches in recognition of varied abilities, interests, and learning styles of students. The program is also designed to provide a comprehensive foundation of basic principles in the art and science of physical therapy; an opportunity is provided to pursue a particular aspect of physical therapy in depth. The concept that learning is

a lifelong process pervades the entire educational program. The overall aim is to prepare graduates who are self-directed, self-accountable generalists possessing problem-solving skills, who can perform in any of a variety of settings. Physical therapists with these capabilities are prepared to develop specialty skills, to contribute to the leadership and growth of physical therapy, and to advance the quality of health care through clinical research and collaboration with other professionals.

The Master of Science degree is awarded upon completion of the program (academic study and field experience) as outlined. The program described in this bulletin is accredited by the American Physical Therapy Association and is registered by the Department of Education of the State of New York. Graduates are eligible to take state licensure examinations in physical therapy held at intervals during the year. All states require a license or registration of physical therapists. New York State examinations are usually given in June and December of each year. Information regarding examination schedules in other states may be obtained by writing the Division of Licensing in each state.

# ADMISSION REQUIREMENTS

Students are admitted only in September. Applications for admission are accepted from qualified men and women and should be received no later than January 15 of the year the applicant wishes to begin the program. Applications are accepted after that date subject to availability of places in the entering class. Enrollment is limited because of limitation in space and facilities. Specific requirements for admission to the program are as follows.

# M.S. Degree Program

All applicants must be graduates of an approved college with a Bachelor of Science or Bachelor of Arts degree in any major. The academic work must include (a) 12 semester credits in biological sciences, including 3 semester credits in anatomy and 3 semester credits in physiology; (b) 14 semester credits in physical sciences, including a year in general chemistry (organic chemistry may be included) and a year in introductory physics that deals with heat, light, electricity, mechanics, etc.; (c) 12 semester credits in humanities, including 6 in English (one course must be in writing); (d) 3 semester credits in social studies, consisting of a basic course in sociology; (e) 9 semester credits in psychology, including a course in abnormal psychology; (f) 2 semester credits in statistics. In addition, all students must have a course in First Aid including Cardiopulmonary Resuscitation (college, Red Cross, or the equivalent). Grades in specific prerequisite courses must be of C or better to satisfy the admission requirement. Grades below C are not acceptable. The student may have concentrated in any area but evidence of a balanced education is preferred.

An applicant must submit results of the Graduate Record Examination. In compliance with recent legislation in New York State, only a limited number of testing dates a year are available in this state and reportable to state institutions. Applicants are advised to obtain the schedule from the Educational Testing Service, Princeton, N.J. 08540, and apply to take the first possible administration. The institution number to use for tests is 2137, Department 48.

Evidence of having explored physical therapy as a career is important. A work or volunteer experience of a minimum of forty (40) hours in at least two different physical therapy settings is required.

#### Admission Procedure

Application forms may be obtained by writing to Program in Physical Therapy, College of Physicians and Surgeons, 630 West 168th Street, New York, N.Y. 10032, and should be filed by January 15 of the year in which the student wishes to begin his or her studies. The completed form must be accompanied by the application fee (see Registration and Expenses—Fees). This fee is not returnable and is not credited toward tuition. Transcripts of all post-secondary education are needed as well as three form letters of reference. If possible, two letters should be from professors of the department in which the student did or is doing major study. The third letter, if possible, should be from someone who has supervised the applicant's work (paid or volunteer) in a health facility, camp, school, and the like.

If a personal interview is required by the Committee on Admissions, a notification will be sent to the applicant.

# Acceptance Fee

An applicant who has been accepted must notify the Director that he or she intends to matriculate and must accompany the notification with a check or money order for \$100, payable to Columbia University, no later than two weeks after receiving notice of the acceptance. The acceptance fee is applied to the applicant's tuition upon registration in the class to which the applicant has been admitted. If the applicant does not register in that class, the acceptance fee will be retained by the University unless the University for any reason cancels the acceptance.

# Health Examination and Liability Insurance

Following acceptance into the program, all students are requested to have a preregistration physical examination and to return the Health Certificate to the Program Director for filing in the Student Health Office. It is also important for students to purchase liability insurance prior to

working with patients.

The physical therapy program beginning in the first term and extending until graduation is a combined academic and experiential program. Institutions in which field work assignments are made require a certificate of good health before permitting students to work with patients / clients. Health forms are mailed following acceptances and must be returned prior to registration. In addition, they require that all students carry professional and personal liability insurance. Following registration, forms meeting this requirement are made available.

#### International Students

Students from other countries are urged to apply for admission one year in advance of the time they wish to begin their studies. Applicants must submit a Preliminary Application for International Students to the International Student Office before making final application to the Program in Physical Therapy, This preliminary application is available from either the International Student Office, 208 Lewisohn, Columbia University, New York, N.Y. 10027 or from the Program in Physical Therapy. The Physical Therapy Admissions Committee is guided by an evaluation of educational credentials by the International Student Office to determine the equivalency of an applicant's educational background in terms of admission requirements. The applicant must fulfill the usual admission requirements, as all students are considered for admission on the same basis.

The staff of the Office of the International Student Adviser, 208 Lewisohn, provides advice and counseling to foreign students on such matters as housing, personal and financial problems, and regulations of the United States Immigration and Naturalization Service (visas, extensions of stay, work permission, temporary departure from the United States, transfer from Columbia to another school, termination of study). Information about the various international student clubs at Columbia and about opportunities to attend conferences, travel in the United States, and participate in community and cultural activities may be obtained from this office. Maps of New York City and discount tickets to concerts and plays are available.

The staff of the Office of International Student Admissions, 208
Lewisohn, provides information and counseling on University admission, advanced standing, English proficiency examinations, and academic placement.

# DEGREE REQUIREMENTS

1. The student must satisfactorily fulfill the requirements of the program (60 points minimum) within three years.

2. All field work requirements

must be completed.

3. A master's thesis is required.

# Program of Study

The University reserves the right to withdraw or modify these courses or to change the instructors as may be necessary. See *Key to Course Listings*.

# MASTER OF SCIENCE DEGREE PROGRAM

The average student can expect to complete this program in two academic years and an intervening summer.

The program is planned to enable students to perform skillfully those activities deemed necessary to enter the field of physical therapy. Upon graduation students will understand the problem-solving approach to health care and, based on these problem solving skills, they can expect to be able to:

- determine the need and appropriateness of physical therapy intervention for any individual through the process of evaluation by (a) assessing an individual's functional status within the environment, (b) assessing some functions of the body systems including neuromusculoskelctal, cardiovascular, pulmonary, and integumentary, (c) using selected evaluative tests in order to identify existing and potential physical limitations to functioning within the individual's environment, (d) recording and interpreting results of selected evaluative tests with special consideration of the individual's medical, social, cultural, economic, and psychological status;
- 2. establish practical and measurable goals with that individual, using knowledge of (a) normal function, (b) pathological processes, (c) the individual's lifestyle and expectations;
- 3. develop a goal-directed plan (a) with judicious use of available re-

sources, (b) in collaboration with individuals and their families and other health workers, (c) with consideration of all safety measures;

- 4. implement, document, and reevaluate the goal-directed plan either directly or by delegating appropriate activities or by instructing and supervising other health workers or families in order to (a) maintain and restore strength, endurance, coordination, relaxation, and range of motion, (b) promote healing, (c) relieve pain, (d) improve functional independence;
- 5. implement a specific plan of care which includes the safe application of (a) physical agents, (b) therapeutic exercises and procedures, (c) developmental activities, (d) functional activities, (e) assistive/adaptive devices/equipment, (f) therapeutic equipment, (g) external dressings and supports;
- 6. organize and operate a physical therapy service by applying knowledge of administrative and managerial principles;
- 7. participate in self-evaluation, peer-review, and continuing education for continued self-growth and continued growth of the profession;
- 8. use communication skills appropriately in interpersonal and group situations in order to effectively assume the role of clinician, educator, administrator, and consultant;
- 9. apply the basic principles of scientific method to (a) read and interpret literature, (b) participate in clinical research activities, (c) critically analyze new concepts and findings provided by others;

- 10. identify issues and problems in health care delivery systems and propose alternative solutions;
- 11. identify and recommend solutions for architectural barriers;
- 12. participate in health promotion education.

The curriculum is organized around five centers of focus, namely, professional concepts, body systems, therapeutic intervention, teaching strategies, and research. These elements serve as threads for planning instruction and learning activities for students.

The first year of the program and the intervening Summer Session are directed toward development of the clinician role. The second-year activities are expanded to include more advanced clinical skills and an emphasis on broader aspects of health administration, supervision, teaching, and research. Clinical experience, or field work, is integrated into the total program.

Courses and their sequence and an Outline of the Program are given below.

# First Year: Autumn Term

#### H.P.M6101x

Human anatomy

Professor Noback (in charge) and Ms. Cola-

cino. 3 points.

Prerequisite: physical therapy program admission requirements and the instructor's permission. Anatomy of the human body, with emphasis on those features that are most important for muscular activity. Lectures and laboratory work, the latter based on prepared dissection of the human body.

#### H.P.M6103x

Anatomy of the nervous system

Professor Noback. 2 points.

Prerequisite: physical therapy program admission requirements and the instructor's permission. Anatomy of the human nervous system, including the structural unit, the cerebrospinal system, and the auto-

nomic system. Attention to the gross divisions of the brain, spinal cord, and peripheral nerves, with emphasis on the controls affecting voluntary motion.

# H.P.M6220x Normal human growth and

development

Professor Jones and Mrs. Cook. 2 points.
Prerequisite: physical therapy program admission requirements and the instructor's permission. Individual development from conception to death, with exploration of the context of each life stage, its opportunities, problems, and emotions. Attention given to the interrelationship of individual development with significant evolving institutions such as the family and the culture. This interdisciplinary course is designed to utilize each student's independent learning style. Students may meet course objectives through readings, use of

videotapes, and observational experiences.

Required seminars allow for interchange

#### P.T.M6507x

of ideas.

# Analysis of human movement

Professor Hecox. 3 points.

Prerequisite: physical therapy program admission requirements and the instructor's permission. A contemporary approach to kinesiology requiring students to distinguish and integrate many subdivisions within the discipline, including (1) structural and functional kinesiology dealing with the form and function of the body, (2) biomechanics, (3) correlations of these with basic neurophysiological principles, and (4) psychological kinesiology, studying the mutuality of movement and meaning, including topics such as selfimage, personality, and motivation. Major emphasis is on the analysis of normal movement, including implications of its relevance to physical therapy.

#### P.T.M6508x

# Principles of measurement and therapeutic exercise

Professor Schmitz. 3 points.

Prerequisite: physical therapy program admission requirements and the instructor's permission. Analysis, administration, and interpretation of selected test procedures used in patient evaluation to determine the need for physical therapy intervention. Major emphasis is also on the principles of therapeutic exercise utilized by physical

therapists to improve motor function. Problem-solving approach to selection and application of appropriate procedures, and evaluation and modification of treatment programs.

#### P.T.M6532x

Physical therapy procedures

Mrs. Beyda. 3 points.

Prerequisite: physical therapy program admission requirements and the instructor's permission. An indoctrination of the professional into the roles of the physical therapist as a clinician, teacher, supervisor, and researcher. Introduction of basic concepts and initiation into basic procedures of physical therapy to serve as a foundation for further growth.

## P.T.M8500x Scientific inquiry I

Professor Day. 2 points.

Prerequisite: physical therapy program admission requirements and the instructor's permission. Orients students to the philosophy and principles of scientific inquiry, with emphasis on conceptual understanding of experimental design and statistical principles.

# First Year: Spring Term

H.P.M6322v

Clinical psychiatry Dr. Siegal. 2 points.

Prerequisite: physical therapy program admission requirements and the instructor's permission. The etiology and symptomatology of the psychiatric disorders, including the psychoneuroses, psychoses, organic mental syndrome, and application to rehabilitation patients.

# H.P.M6324v

Clinical pathology

Ms. Durfee, Ms. Pang, and Professor Teschendorf (coordinators). 4 points. Prerequisite: physical therapy program admission requirements and the instructor's permission. A systems approach to the study of pathophysiology. Emphasis on the normal and abnormal response to disease and injury and effects on bodily systems. Consideration also given to selected disorders frequently seen by physical and occupational therapists that includes a survey of etiology, pathology, symptomatology, management, and prognosis. Lectures, group discussions, and independent problcm solving.

## P.T.M6509v

Applied clinical physiology Professor Jones and associates. 2 points. Prerequisite: general physiology, P.T.M6508, and the instructor's permission. A scientific inquiry into physiological adaptations of various body systems when changes occur in physical activity or environment or when pathological changes threaten to disturb regulation. Emphasis on relationship to treatment procedures in physical therapy.

# P.T.M6510y Neurophysiological analysis of movement

Professors Emmers and Jones. 2 points. Prerequisite: *P.T.M6507*, *H.P.M6220* or the equivalent, H.P.M6103, and the instructor's permission. Neurophysiological basis of movement, normal growth, and development as a means of evaluation. Application of neurophysiological principles of human motion. Analysis of current theories and methods used in developmental disabilities. Course is a basis for applying a problem-solving approach to neurological disabilities.

## P.T.M6533v Physical agents

Professor Hecox. 3 points.

Prerequisite: P.T.M6532, P.T.M6508, and the instructor's permission. Rationale for the selection of specific physical agents and techniques in the therapeutic uses of electricity, sound, heat, cold, compression, and water and other liquids. Physical and physiological principles, environmental factors, and clinical considerations included.

# P.T.M6534v

Physical rehabilitation: evaluation and treatment

Professor Schmitz. 3 points. Prerequisite: P.T.M6532, P.T.M6508, and the instructor's permission. Evaluation and management of physical disabilities from a rehabilitation perspective. Topics include biomechanics of pathological gait, gait training, and selection and use of assistive devices for patient mobility. Major consideration also given to evaluation and treatment of patients with the following disabilities: amputations, spinal cord injury, burns, and chronic progressive neurologic diseases. Additional topics covered include prosthetics, orthotics, and the treatment planning process.

P.T.M8501y Scientific inquiry II Professor Day. 1 point.

Prerequisite: P.T.M8500 and the instructor's permission. Provides the student with the opportunity to critically read the medical literature, grasp the uncertainty that exists in medical research, draw conclusions regarding the integration of research and clinical practice, systematically locate and review scientific information, and begin the initial conceptual development of a proposal. Emphasis is on the critical analysis of research reports in the health sciences.

Clinical observation and orientation Professor Teschendorf (coordinator) and clinical faculty. 0 points.

Introduction to clinical environment and various professional roles through assignments in clinical settings; observation of administrative procedures and supervised practice in many aspects of patient treatment; emphasis on early problem-solving skills, data collection and evaluation; weekly seminar provides discussion for clinic issues and current methods in the clinical education process.

## Summer Session\*

# P.T.M6601z

Clinical experience I

Professor Teschendorf (coordinator) and clin-

ical faculty. O points.

A full-time assignment in a clinical setting for a minimum of eight weeks, after which the student should demonstrate proficiency in the competencies expected from having completed the first year of the curriculum.

# Second Year: Autumn Term

#### P.T.M6535x

Management of neurological disabilities

Professor Jones and associates. 4 points. Prerequisite: P.T.M6532, P.T.M6508, P.T.M6610, P.T.M6510, H.P.M6324, and the instructor's permission. Application of physical therapy evaluations and procedures to children and adults with central nervous system disorders. Physical therapist specialists present principles of patient management. Emphasis is on improving skill in clinical decision making when planning programs and when utilizing neurophysiological principles of treatment.

#### P.T.M6536x

Management of orthopedic disabilities Professor Schmitz and clinical faculty. 4 points.

Prerequisite: P.T.M6507, P.T.M6508, P.T.M6610, P.T.M6532, H.P.M6324, and the instructor's permission. Physical therapy evaluation and treatment of common musculoskeletal problems. Topics related to disease, dysfunction, and injury of the musculoskeletal system are addressed. Strong emphasis on rationale and techniques of joint mobilization. Problemsolving approach to selection and application of appropriate treatment procedures, evaluation and modification of treatment programs.

#### P.T.M6537x

Physical therapy: a health service *Professor Dickinson (coordinator). 3 points.* Prerequisite: *P.T.M6601.* Orients students to health care services and to the practice of physical therapy within various organizations and communities. Students examine administration via the management continuum: planning, organization, supervision, control, evaluation. Quality care is a theme that pervades.

#### P.T.M6602x

## Clinical experience II

Professor Teschendorf (coordinator) and clinical faculty. 2 points.

A continuation of *P.T.M6601—Clinical experience I*, supplementing the student's functioning in different environments; integration of activities and skills developed in the concurrent courses; opportunity to expand into specialty settings.

<sup>\*</sup>Students are considered to be on full-time programs in the Summer Session between the first and second years and also in the Second Year: Spring Term. Courses P.T.M6601—Clinical experience I and P.T.M6603—Clinical experience IIII require full-time field experience and P.T.M8503—Master's thesis requires full-time educational activity to complete the master's thesis.

# P.T.M8502x Thesis development Professor Day. 2 points.

Prerequisite: *P.T.M8501* and the instructor's permission. Research designs in the health sciences; in preparation for *P.T.M8503* the student also develops a proposal approved by the Master's Committee.

# Second Year: Spring Term\*

# P.T.M6603y

Clinical experience III

Professor Teschendorf (coordinator) and clin-

ical faculty. 3 points.

A continuation of *P.T.M6602—Clinical* experience II. Planned experience in overall delivery of physical therapy services with application to special area of interest. Opportunities are provided to work with a specific age group; special disability group; to assist with administration, teaching, supervision, or research in a wide variety of environments.

## P.T.M8503y Master's thesis

Professor Day. 1 point.

Prerequisite: *P.T.M8502* and the instructor's permission. Completion and presentation of a thesis that meets the standards set forth by the Master's Committee.

#### Electives

At least six (6) elective points are needed to fulfill the sixty (60) point degree requirement. Electives may be taken in the intervening summer between the first and second years or during the autumn or spring term of the second year. The student should consult the bulletins of the School of Public Health, School of Social Work, Graduate School, and Teachers College, as well as the offerings in this bulletin.

# P.T.M6511x, y, z

Practicum in physical therapy Professor Teschendorf (coordinator). 2 or 3

points.

Prerequisite: the coordinator's permission. Individually designed learning experience in a variety of content areas. Student may elect to expand knowledge base in clinical skills or administration, teaching, or research.

## H.P.M8200x, y, z Research advisement

Faculty advisers. 0 points.

Students who require continued advisement beyond the one-term *P.T.M8503—Master's thesis* must register for *Research advisement* each term until the thesis is completed.

<sup>\*</sup>Students are considered to be on full-time programs in the Summer Session between the first and second years and also in the Second Year: Spring Term. Courses P.T.M6601—Clinical experience I and P.T.M6603—Clinical experience III require full-time field experience and P.T.M8503—Master's thesis requires full-time educational activity to complete the master's thesis.

# Outline of the Program

# M.S. Degree Program

FIRST YEAR:		FIRST YEAR:	
AUTUMN TERM	POINTS	SPRING TERM	POINTS
H.P.M6101: Human	2	H.P.M6322: Clinical	2
anatomy H.P.M6103: Anatomy of	3	psychiatry H.P.M6324: Clinical	2
the nervous system	2	pathology	4
H.P.M6220: Normal		P.T.M6509: Applied	2
human growth and development	2	clinical physiology P.T.M6510:	2
P.T.M6507: Analysis of	-	Neurophysiological	
human movement	3	analysis of movement	2
P.T.M6508: Principles of measurements and		P.T.M6533: Physical agents	3
therapeutic exercise	3	P.T.M6534: Physical	Ü
P.T.M6532: Physical	2	rehabilitation:	
therapy procedures P.T.M8500: Scientific	3	evaluation and treatment	3
inquiry I	$\frac{2}{18}$	P.T.M8501: Scientific	
Total points	18	inquiry II	1
		Clinical observation and orientation	0
		Total points	17
SUMMER SESSION	POINTS		
P.T.M6601: Clinical			
experience I (8 weeks			
minimum)	0		
SECOND YEAR:	DOINTS	SECOND YEAR:	DOINTS
AUTUMN TERM	POINTS	SPRING TERM	POINTS
P.T.M6535: Management of neurological		P.T.M6603: Clinical experience III	3
disabilities	4	P.T.M8503: Master's	J
P.T.M6536: Management	4	thesis	$\frac{1}{4}$
of orthopedic disabilities P.T.M6537: Physical	4	Total points	4
therapy: a health service	3		
P.T.M6602: Clinical experience II	2		
P.T.M8502: Thesis	۷		
development	$\frac{2}{15}$		
Total points			
Electives may be asless in al.			d sassad

Electives may be taken in the intervening summer between the first and second years or during the autumn or spring term of the second year. A minimum of six (6) elective points is required.

# Hospitals and Agencies Affiliated for Clinical Education

ALLIED SERVICES FOR THE HANDICAPPED, SCRANTON, PA. Kathryn Romenski Chief Physical Therapist Mardi Steppacher Clinical Coordinator

ASSOCIATED THERAPIES, WANTAGH, N.Y. Joan Malden Supervisor

BELLEVUE HOSPITAL, NEW YORK, N.Y. Joan Ross Rehabilitation Coordinator Barbara Schad Chief Physical Therapist

BETH ISRAEL MEDICAL CENTER, NEWARK, N.J. Lester Bornstein Executive Director Robert Dyer Chief Physical Therapist

BETH ISRAEL MEDICAL CENTER, NEW YORK, N.Y.

James T. Demopoulos, M.D.

Director, Department of Rehabilitation

Medicine

Susan Milliken Chief Physical Therapist

BLYTHEDALE CHILDREN'S HOSPITAL, VALHALLA, N.Y.
Robert Stone
Executive Director

Niels L. Low, M.D. Clinical Director

Yasoma B. Challenor, M.D. Chief, Rehabilitation Medicine
Patry Landie

Betty Landis
Director of Physical Therapy

BRONX MUNICIPAL HOSPITAL CENTER, JACOBI HOSPITAL, BRONX, N Y Justin Alexander, Ph.D. Chief of Physical Therapy

BURKE REHABILITATION CENTER, WHITE PLAINS, N.Y.
William D. O'Connor
Associate Executive Director
Fletcher McDowell, M.D.
Medical Director
Jean LaVigne
Director, Physical Therapy

EAST SIDE SPORTS MEDICINE CENTER, NEW YORK, N.Y. Anthony J. Saraniti Director

Dania A. Sweitzer
Assistant Director/Clinical Education
Coordinator

ENGLEWOOD HOSPITAL, ENGLEWOOD, N.Y.

James A. Buffington
Executive Vice President
Noel Galen, M.D.
Chairman, Medical Executive
Committee

Robert Geisenheimer Chief Physical Therapist

GARDEN STATE REHABILITATION
HOSPITAL, TOMS RIVER, N.J.
Kathleen Hoar
Director of Physical Therapy, Clinical
Education Supervisor

GAYLORD HOSPITAL, WALLINGFORD, CT.
Anne Ballantyne
Chief, Physical Therapy Department
Sue Caroti
Coordinator of Education

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Matthew Lee, M.D.
Director, Rehabilitation Medicine
Service
Alice L. Eason

Chief, Physical Therapy Department

HACKENSACK HOSPITAL, HACKENSACK, N.J.

Lawrence Smith Executive Director Dominic R. Vistocco

Director, Physical Therapy

HARLEM HOSPITAL CENTER, NEW YORK, N.Y.

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HELEN HAYES HOSPITAL, WEST HAVERSTRAW, N.Y.

Patricia Sullivan

Director of Clinical Affairs Barbara Hanley

Director, Physical Therapy Sue Donovan

Assistant Director, Physical Therapy

Dee Jacobs

Assistant Director, Physical Therapy

Mary Cardi

Assistant Director, Physical Therapy

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Steven Danziger Department Head Terry Barahman Supervising Therapist

HOSPITAL FOR SPECIAL SURGERY, NEW YORK, N.Y.

Leon Root, M.D. Medical Director Judith M. Kurtz

Director, Rehabilitation Services

Isel Gonzalez Assistant Director Sherri Schexnayder Assistant Director

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Milton Lowenthal, M.D. Medical Director Theodore Corbitt Supervising Therapist

IOHN F. KENNEDY MEDICAL CENTER, EDISON, N.I.

Joseph Sherber Executive Director W. Deane Butler Chief Physical Therapist

KESSLER INSTITUTE FOR REHABILITATION, WEST ORANGE AND

EAST ORANGE, N.J. Kenneth W. Aitchison

Executive Director

Bonnie Scott Director, Physical Therapy

Martha Sliwinski Clinical Coordinator

KINGS COUNTY HOSPITAL CENTER. BROOKLYN, N.Y.

Phyllis Teich

Supervisor, Physical Therapy

Heidi Kahn

Clinical Education Supervisor

KINGS HARBOR HEALTH CARE CENTER. BRONX, N.Y.

Susanne Kamen Chief Physical Therapist

KINGSBROOK JEWISH MEDICAL CENTER. BROOKLYN, N.Y.

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Elliot Brown

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LA GUARDIA HOSPITAL, FOREST HILLS, N.Y.

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Martha Shane

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Director of Rehabilitation Medicine Department

John Capecchi

Director, Physical Therapy

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Elizabeth Geiger

Chief Physical Therapist

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Roosevelt Site

James Dunleavy

Chief Physical Therapist

St. Luke's site

Beth Fedirko

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Alfred Burr Chief, Physical Therapy

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WHITE PLAINS HOSPITAL, WHITE PLAINS, N.Y.

Gabriel Rinzler, M.D.
Director, Department of Physical
Medicine and Rehabilitation
Elizabeth Gaynor
Chief Physical Therapist

# Programs in Occupational Therapy

Occupational therapy is a health profession that uses purposeful activities, appropriate to each person's age and social role, to restore, develop, or maintain the ability for independent, satisfying living. Occupational therapists evaluate, treat, and provide consultation to individuals whose abilities to cope with the tasks of everyday living are threatened or impaired by physical illness or injury, psychological and social disability, or developmental deficits.

As members of a health team, occupational therapists provide special services that include teaching daily living skills and developing play skills, leisure-time use, and prevocational capacities; fostering the development of skills needed for integration and coordination of sensation, perception, and motor activity; designing, fabricating, and applying selected splints or adaptive equipment; using individually directed programs of exercises and activities to enhance functional performance; and adapting environments when needed. These services may be provided individually, in groups, or through social systems. Depending on the setting and each patient's or client's needs, occupational therapists work in consultation with physicians, physical therapists, psychologists, social workers, speech therapists, vocational counselors, and teachers. Positions are available working with clients of all ages in hospitals, community health centers, rehabilitation centers, halfway houses, schools, nursing homes, and in patients' homes. There is an acute shortage of occupational therapists to meet the increasing demands of programs concerned with (1) prevention and health maintenance, (2) rehabilitation, and (3) daily living tasks and

vocational adjustment. Therapists are needed as clinicians, administrators, educators, and researchers.

The content of the educational programs in occupational therapy at Columbia University reflects the philosophical beliefs on which the profession is founded:

A person is an active being whose development is influenced by the use of purposeful activity. Content emanating from this belief focuses on the normal development throughout the life span, including age-related, role-specific activity, as well as the structure and function of interrelated biological and behavioral systems.

Human life includes a process of continuing adaptation that promotes survival and self-actualization through mastery of life skills and satisfying performance of leisure-time activities. This adaptation may be interrupted by biological, psychological, and environmental factors at any time in the life cycle. Courses in pathology and psychopathology address the conditions that prevent the individual from functioning adequately within the confines of a unique lifestyle.

Purposeful activity/occupation, including its interpersonal and environmental components, may be used to prevent and mediate dysfunction and to elicit maximum adaptation. Course content provides not only the theoretical rationale for using activities to produce change in patients or clients of all ages with diverse problems but also the methods of intervention that can be used to assist patients to do individual problem solving and develop their own ways of coping.

The purpose of the program is the preparation of competent occupational therapists who, by virtue of their graduate professional education, can enter the health care field primarily as clinicians, with beginning skills in research, administration, and education. The curriculum is based on the premise that students attain competence by learning how to learn independently.

Students come into this program with a strong foundation in the liberal arts, including the humanities and sciences. Professional education builds on and refines this knowledge base and develops skills in the learner in concept formation, analysis, syn-

thesis, and problem solving.

# MASTER OF SCIENCE DEGREE (ENTRY LEVEL)

The entry-level occupational therapy program leads to the degree of Master of Science and is directed toward the development of master clinicians and leaders in the field by providing an opportunity for the establishment of a generic foundation, followed by the acquisition of basic concepts of administration, supervision, and education, and by development of concepts and techniques in the scientific method.

The courses described in this bulletin meet the requirements set forth by the American Occupational Therapy Association and by the Council on Medical Education of the American Medical Association, as published in their Essentials for an Educational Program for the Occupational Therapist, which regulates the standards by which schools are accredited. The program is reviewed every five years to assure maintenance of established standards. Graduates of the program are eligible for the certification examination leading to admission to the Registry of Occupational Therapists, maintained by the American Occupational Therapy Association. This examination is held throughout the country in January and June of each year. Admission to the registry is the certification of a therapist to practice in the majority of states.

An increasing number of states require a state license to practice, usually based on a proficiency examination. A student should become familiar with the requirements in his or her state so that any required examination may be taken as soon as possible after graduation. In New York State, licensure law requires that a graduate pass a qualifying examination conducted by the Department of Education of the State of New York. The Department has approved, for this purpose, the certification examination referred to above.

# MASTER OF SCIENCE DEGREE (ADVANCED LEVEL) IN OCCUPATIONAL THERAPY: ADMINISTRATION OR EDUCATION

Increasingly, occupational therapy clinicians are being sought for leadership positions for which advanced professional education is required. Developments in health care services call for additional expertise in administrative, supervisory, and programplanning skills to effect meaningful change. A documented shortage of qualified occupational therapy faculty members exists nationwide in colleges and universities for academic and clinical teaching. With the continued growth in numbers of persons over sixty-five, it is clear that more occupational therapists will be needed for both medical and community programs serving the elderly. Research experience is vitally needed to verify and refine practice.

The advanced programs are designed to meet the needs of the expe-

rienced certified occupational therapist who seeks increased professional knowledge and skill to prepare for specialized roles as administrator. educator, program developer, or researcher. An optional specialization in gerontology is offered as content within either the educator or administrator track.

The programs for the degrees of Master of Science in Occupational Therapy Administration and Master of Science in Occupational Therapy Education comprise 36 points of graduate-level courses and the completion of a thesis. The average fulltime student can expect to complete the program in twelve months of study. The part-time student follows an individual plan of study to complete all requirements within five vears.

All students take core courses in advanced occupational therapy theory and research methodology. Each student selects a Role Specialization Track either in administration and program development or in academic and clinical teaching. A designated number of courses is also required for each track. Elective content areas, including gerontology, may be selected from courses offered by the Occupational Therapy Program, the School of Public Health, Teachers College, or other graduate divisions of the University.

The philosophy of advanced occupational therapy education at Columbia University rests upon a learning model that combines the elements of graduate study with those of greater professional knowledge.

The program seeks students who are self-disciplined, independent, and able to make responsible choices for their directions. Graduate professional students are seen as flexible. creative persons who are willing to assume a participative role in shaping and refining the educational program

of which they are a part and to take advantage of the extensive resources offered by the University.

The two-track role specialization curriculum is based upon three separate but interrelated components: (1) analysis and synthesis of occupational therapy theory and practice; (2) preparation for specialized roles as administrators or educators; and (3) skill development for research design and implementation.

# ADMISSION REQUIREMENTS

Full-time and part-time students are admitted to all programs. Students in the entry-level program are admitted only in September. Part-time students in the advanced-level program are admitted in both September and January. Program plans for part-time students are worked out on an individual basis to assure a logical sequence for required courses. Continuous registration is expected of all students.

# M.S. Degree (Entry-Level) Program

The program invites applications from students who hold a baccalaureate granted by a college or university of recognized standing. The work for the bachelor's degree must include (a) 11 semester credits in biological sciences, including human physiology; (b) 12 semester credits in psychology, including abnormal; (c) 6 semester credits in sociology, 3 of which may be in anthropology; and (d) 6 semester credits in English communication skills. Students who have not had chemistry and physics in high school are urged to include one term of each in their undergraduate program of study. An introductory course in statistics is recommended.

Recent official scores of the Graduate Record Examination should be submitted. Early admission may be

granted to students who take the test prior to January 1, 1986. The schedule of test dates may be obtained from the Educational Testing Service, Princeton, N.J. 08540. The Columbia institution number for these tests is 2137, Department 44. (During 1985–1986, an applicant who has met all other admission requirements may be accepted on the basis of academic standing in lieu of the Graduate Record Examination.)

Each applicant is required to submit three letters of reference on forms that are supplied by the program. A personal interview may be requested.

Applicants must have prior knowledge of, or experience in, occupational therapy through observation, work, or volunteer experience.

# M.S. Degree (Advanced-Level) Programs

The programs are open to applicants who hold a baccalaureate granted by a college or university of recognized standing and certification as an occupational therapist from the American Occupational Therapy Association. In addition, an applicant should have (a) a minimum of two years of working experience as an occupational therapist and (b) elementary skill in statistics (during 1985–1986, this may be taken during the first term in the program).

Recent official scores of the Graduate Record Examination should be submitted. (During 1985–1986, an applicant may be accepted on the basis of academic standing in lieu of the Graduate Record Examination.)

Each applicant is required to have a personal interview and to prepare a résumé and statement of goals and directions for graduate education. Three letters of reference must also be submitted on forms that are supplied by the program.

Transcripts of all post-secondary education should be forwarded by the registrars of the respective schools directly to the Director of Programs in Occupational Therapy.

# **Admission Procedure**

Forms to be used in applying for admission may be obtained by writing to the Occupational Therapy Office, College of Physicians and Surgeons, 630 West 168th Street, New York, N.Y. 10032. It is advisable that applications be filed by the December preceding the academic year in which the student wishes to begin studies. The completed forms must be accompanied by the application fee (see *Registration and Expenses*—Fees). The fee is not returnable and is not credited toward tuition.

Transcripts of all post—secondary school education should be forwarded by the registrars of the respective schools directly to the Director of Programs in Occupational Therapy.

# Acceptance Fee

An applicant who has been accepted must notify the Director that he or she intends to matriculate and must accompany the notification with a check or money order for \$100, payable to Columbia University, no later than two weeks after receiving notice of the acceptance. The acceptance fee is applied to the applicant's tuition upon registration in the class to which the applicant has been admitted. If the applicant does not register in that class, the acceptance fee will be retained by the University unless the University for any reason cancels the acceptance.

# Health Examination and Liability Insurance

The Occupational Therapy Program is a combined academic and experiential program, beginning with the first term and extending to graduation. Institutions in which field work assignments are made require a certificate of good health before they will permit students to work with patients / clients. In addition, they require that all students carry professional and personal liability insurance. All students are required to have a pre-registration physical examination and proof that professional and personal liability insurance has been obtained.

Forms to be used in meeting both of these requirements prior to the September registration are mailed early in the summer to all accepted students.

# International Students

Students from other countries are urged to apply for admission one year in advance of the time they wish to begin their studies. Application must be made on the form provided by the Occupational Therapy Office. The applicant must fulfill the usual admission requirements, as all students are considered for admission on the same basis.

A personal interview is recommended, when feasible. If the applicant does not plan to be in this country until after action has been taken on his or her application, the College will try to arrange for an interview with a therapist or physician in the home country.

At the time the application is filed, records must be submitted of all college or university education completed. These will be evaluated to determine the equivalency of the applicant's educational background in terms of admission requirements.

All foreign applicants must submit scores from the Test of English as a Foreign Language (TOEFL). Applicants may be requested to undertake a course in English in this country prior to beginning the professional program.

The staff of the Office of the International Student Adviser, 208 Lewisohn, provides advice and counseling to foreign students on such matters as housing, personal and financial problems, and regulations of the United States Immigration and Naturalization Service (visas, extensions of stay, work permission, temporary departure from the United States, transfer from Columbia to another school, termination of study). Information about the various international student clubs at Columbia and about opportunities to attend conferences, travel in the United States, and partic-

The staff of the Office of International Student Admissions, 208
Lewisohn, provides information and counseling on University admission, advanced standing, English proficiency examinations, and academic placement.

ipate in community and cultural activities may be obtained from this office. Maps of New York City and dis-

count tickets to concerts and plays are

available.

# DEGREE REQUIREMENTS

# M.S. Degree (Entry-Level) Program

1. Continuous registration is expected until satisfactory completion of all requirements. All academic and clinical requirements must be completed in four years. Leave of absence: A student who must interrupt studies for adequate reason—such as sustained ill health or military service—may be granted a leave of absence for

a stated period, usually not to exceed one year. The student should apply in writing to the Director of Programs in Occupational Therapy and include in the application the specific reason for requiring the leave and the length of time requested.

- 2. A minimum of 60 points of approved course work, based on an average course load of 15 points a term for full-time students, and 8 points a term for part-time students.
- 3. Equivalency credit may be granted on an individual basis when a course equivalent to any of the program's required courses has been completed at another approved institution within a five-year period. At the time of admission, the student should submit in writing a description of the course(s) and a content outline of the material completed. Prior to registration a proficiency examination may be required in the challenged area. Course substitution will be required to meet the minimum course load (see No. 2, above).
- 4. Minimum course requirements in areas of basic competency must be completed by all candidates: biological sciences, behavioral sciences, medical conditions, activities, and occupational therapy evaluation and treatment procedures.

Minimum course requirements must be completed in the following additional areas of competency: principles of administration; principles of supervision; and scientific method.

5. A minimum of twenty-four weeks of full-time (or the equivalent) supervised field experience with clients in programs of prevention, maintenance, and remediation. All field work requirements should be completed within twelve months but must be completed within twenty-four months following completion of academic work.

# M.S. Degree (Advanced-Level) Programs

- Continuous registration is expected until satisfactory completion of all requirements. All requirements, including the thesis, must be completed in five years. Leave of absence: A student who must interrupt studies for adequate reason, such as sustained ill health, may be granted a leave of absence for a stated period, usually not to exceed one year. The student should apply in writing to the Director of Programs in Occupational Therapy and include in the application the specific reason for requiring the leave and length of time requested.
- 2. A part-time student is expected to carry a minimum of 3 points a term on a continuous basis until all course work has been completed. Students working only on their thesis are required to register for one point of advisement during each ensuing term. All degree requirements, including the thesis, must be completed within five years.
- 3. A minimum of 36 points of approved graduate course work is required. At least 30 of the required 36 points must be taken at Columbia University, with a minimum of 19 points of the total credits from courses offered in the Occupational Therapy Program. A thesis is required and must be completed before the degree is awarded.
- 4. All students must meet minimum course requirements for competency in the required core courses in advanced occupational therapy theory and professional issues, research methodology, and thesis development.
- 5. At the time of admission to the two-track program, a student selects

either administration or education as the area of role specialization. Minimum course requirements must be completed in each track; for education: principles of curriculum and teaching, principles of supervision, and teaching practicum; for administration: principles of administration and program development, principles of supervision, and administration practicum.

6. Students who enroll in the gerontology content specialization must take 11 of the total 36 points of course work in gerontology.

7. It is recommended that at least 3 points of elective credit be selected by all other students in the area of their role specialization. Other elective credits may be taken in any graduate division of the University.

# SPECIAL STUDENTS

A limited number of nonmatriculated students may be admitted to selected courses on the recommendation of the faculty.

# Programs of Study

The University reserves the right to withdraw or modify the courses of instruction or to change the instructors as may be necessary. See *Key to Course Listings*.

# MASTER OF SCIENCE DEGREE (ENTRY-LEVEL) PROGRAM

The average student can expect to complete this program in twenty-four calendar months of full-time effort in classroom work, field work experience, and independent study. Part-time students can expect to complete the program in thirty-six months of uninterrupted academic and clinical work. Since a number of courses have prerequisites, the part-time student must prepare a total plan of study in the first term to assure a logical sequence of content.

The program is planned to enable the student to gain a mastery of knowledge in occupational therapy, and to practice skills and competencies required of the practicing clinician in this field; in addition, the student examines the principles and methods of leadership roles in administration, supervision, education, and the scientific method. Faculty members work with the students as developers of learning environments and as resource people in collaborative problem solving.

The first year of the program and portions of the second year are directed toward development of the clinician role. Opportunities are available to build the desired competencies through two levels of field experience:

Level I (Clerkships) are scheduled each term on the basis of a minimum

of one full day a week, as concurrent experiences, for application of academic work to clinical practice.

Level II (Practicums) are scheduled as full-time experiences following completion of academic work for that area of practice and are usually in twelveweek blocks. See "Summer Session" following first and second years.

The focus of the second year allows the student to direct attention also to the development of leadership skills in administration, supervision, research, and education. These areas are available for the student to emphasize according to personal preference (see Outline of the Programs). Required introductory course offerings in administration and research may be expanded through additional elective courses. Courses in educational theory and methods are available with a limited number of teaching assistantships as outlined below.

The development of beginning research skills runs through the four terms. During the first year, students acquire foundations of research methods and scientific inquiry, as well as practice in reading and evaluating research reports. All students carry out a master's project during the second year. In the third term, attendance at a research seminar enables the student to plan a topic and develop it to the protocol stage; in the fourth term, emphasis is placed on carrying out the project, analyzing data, and reporting results.

Course requirements and their sequence are given in the *Outline of the Programs*. For electives and substitutions, students should consult the bulletins of Teachers College, the School of Public Health, and the Graduate School of Arts and Sciences.

## First Year: Autumn Term

## H.P.M6101x

Human anatomy

Professors Noback and Colacino. 3 points. Anatomy of the human body, with emphasis on those features that are most important for muscular activity. Lectures and laboratory work, the latter based on prepared dissection of the human body.

#### H.P.M6103x

Anatomy of the nervous system Professor Noback. 2 points.

Anatomy of the human nervous system, including the structural unit, the cerebrospinal system, and the autonomic system. Attention to the gross divisions of the brain, spinal cord, and peripheral nerves, with emphasis on the controls affecting voluntary motion.

## O.T.M6212x

Group process

Professor Falk-Kessler. 2 points.

Prerequisite: general psychology and sociology. A lecture-laboratory designed to familiarize the student with the basic principles underlying group process and behavior—and the clinical application of these principles in occupational therapy—through each individual's participation in the group.

#### H.P.M6220x

Normal human growth and

development

Professors Jones and Cook. 3 points. Individual development from conception to death, with exploration of the context of each life stage, its opportunities, problems, and emotions. Attention given to the interrelationship of individual development with significant evolving institutions such as the family and the culture. This interdisciplinary course is designed to utilize each student's independent learning style. Students may meet course objectives through readings, use of videotapes, and observational experiences. Required seminars allow for interchange of ideas.

#### O.T.M6438x

Activities as natural human phenomena I: products and processes

Professor Cynkin. 3 points.

Exploration of activities as natural human phenomena. Acquisition of selected activities skills involves the exercise of judg-

ment, creativity, and self-reliance. The student is both a participant in and observer of the activities process.

#### O.T.M6551x

Professional foundations Professor Neuhaus. 2 points.

Overview of foundations and scope of occupational therapy in health care and human services. Focus on self-development of student for professional roles and functions through individual and group experriences. Simultaneous clerkship experience introduces the student to occupational

## O.T.M6570x

Introduction to research methods

therapy practice in a variety of settings.

Dr. Bruno. 2 points.

An introduction to the methods of scientific inquiry, research planning, techniques of observation, and analysis and interpretation of data. Topics include formulating problems and hypotheses, measurement, and alternative designs for conducting studies.

# First Year: Spring Term

O.T.M6107y

Kinesiology

Professor Williamson. 2 points.

Application of knowledge of musculoskeletal anatomy, neurophysiology, and biomechanics to the study of human motion. Emphasis on the analysis of movement in daily activity and principles of motor control. Instruction through lectures, movement laboratory, and problem-solving seminars.

#### H.P.M6322v

Clinical psychiatry Dr. Siegal. 2 points.

The etiology and symptomatology of the psychiatric disorders, including psychoneuroses, psychoses, organic mental syndrome; application to rehabilitation patients.

H.P.M6324y

Clinical pathology

Professors Pang and Teschendorf (coordinators). 4 points.

A systems approach to the study of pathophysiology. Emphasis on the normal and abnormal response to disease and injury and effects on bodily systems. Consideration also given to selected disorders frequently seen by physical and occupational therapists that includes a survey of etiology, pathology, symptomatology, management, and prognosis by physicians in clinical practice and research.

# O.T.M6440y

Activities as natural human phenomena II: therapeutic potential

Professor Cynkin. 2 points.

Prerequisite: O.T.M6438. Further exploration of activities as natural human phenomena. Acquisition of selected activities skills is accompanied by analysis of therapeutic potential.

# O.T.M6553y

Principles of evaluation and treatment for mental health

Professor Falk-Kessler and associates. 6

points.

Theories of application relating to occupational therapy within the field of mental health. Evaluation, planning, and intervention strategies are presented in seminar-laboratory sessions and practiced in clerkship experiences.

## O.T.M6571y Research seminar

Professors Neuhaus and Schorow. 1 point. Prerequisite: O.T.M6570. Builds on the foundations of research presented during the first term. Exploration of the role of the professional as a critical consumer of literature. Consideration of sources for research projects through presentations of developing or completed studies in the health sciences.

#### Summer Session

#### O.T.M6653z

Practicum I: evaluation and treatment of patients with mental health

problems

Ms. Miller (in charge), Professor Falk-Kessler, and clinical supervisors. 0 points. Prerequisite: 0.T.M6553 and all other 6000-level courses upon which this area of practice is based, or their equivalents. Supervised field experience with patients or clients, applying evaluative techniques, interpreting findings, planning and implementing treatment, and reporting results. Full time for three months.

## Second Year: Autumn Term

#### O.T.M6218x

Supervision and management

Mrs. Brown. 2 points.

The principles of supervision and management. Analysis and development of effective supervisory approaches and evaluation tools. Experiential laboratories using peer evaluation and critique.

## O.T.M6550x

Teaching assistantship Professor Noback. 3 points.

A few opportunities are available for students recommended by the faculty to assist with components of instruction in H.P.M6101—Human anatomy and H.P.M6103—Anatomy of the nervous system. A written report documenting and evaluating the experience is required.

#### O.T.M6563x

Evaluation and treatment of physical disabilities I

Professor Pang. 6 points.

Emphasis on the biomechanical and rehabilitative approach to treatment. Includes orthotics, splinting, prosthetics, adaptive equipment, activities of daily living, and therapeutic intervention with patients with specific diagnostic characteristics. Laboratory experiences and clerkship as simultaneous practicum.

#### P.H.P6530x

Issues and approaches in health administration

Professor Rosenberg. 3 points.

Lectures and readings on administrative problems and interventions that affect and are affected by all public health practictioners in seeking to improve health care delivery, health care, and health. These concepts are synthesized in small group discussions, a mid-term paper, and a final examination.

#### O.T.M6572x

Research protocol

Professor Schorow and faculty advisers. 2

Further development of skills for planning and carrying out the master's project. Preparation of the protocol, with practice in the use of the library data process, formulation of problems, design of the project, application of statistical measure, and scholarly reporting.

#### TU4030x

Computing literacy

Instructor to be announced. 2 or 3 points. (Students with prior experience with computers must substitute an elective course for TU4030.) Special fee: \$75. An overview of computers within society, particularly education. Demonstrations, readings, and hands-on participation introduce a wide range of computer applications and underlying concepts. Assumes no computing experience.

# Second Year: Spring Term

O.T.M6448y

Special therapeutic approaches Ms. Salz and Ms. Bouley. 2 points. The role of the occupational therapist in specialized areas, such as family therapy, prevocational evaluation, and approaches for working with selected populations.

O.T.M6555y

Prevention and rehabilitation in gerontology and geriatrics

Professor Miller. 4 points.

Introduction to individual and group treatment approaches in meeting the

treatment approaches in meeting the needs of elderly patients; analysis of normal aging and disease states; introduction to indirect service roles (administration, consultation, and education) in service agencies for these clients. Clerkship and seminar.

O.T.M6556y

Occupational therapy in pediatrics Professor Germain. 4 points.

Principles of occupational therapy applied to the child with developmental dysfunction. Emphasis on neurodevelopmental and sensory-perceptual frames of reference. Concurrent lecture, laboratory, and clinical experience with faculty participation of Mr. DeMauro.

O.T.M6564v

Evaluation and treatment of physical disabilities II

Professor Pang. 4 points.

Emphasis on neurodevelopmental treatment approaches including neurophysiologic principles of brain function and the motor system; Rood, Brunnstrom, Bobath, and PNF. Evaluation and treatment applications for patients with various neurological deficits presented in seminar dis-

cussion, case study, problem-solving, and laboratory experiences; clerkship as a simultaneous practicum.

O.T.M6573y Master's project

Faculty advisers. 2 points.

Prerequisite: O.T. M6572

Prerequisite: O.T.M6572. The student carries out the study of the approved topic, collects and analyzes data, and evaluates results. A documented report in thesis format is required.

H.P.M8200 x, y, z Research advisement

Faculty advisers. 0 points.
Students who do not complete the requirements for O.T.M6572 or O.T.M6573 during the designated term must register for 0 points of continued advisement for each additional term required for completion of project.

## Electives

The student should consult the bulletins of the School of Public Health, School of Social Work, Graduate School of Arts and Sciences, Business School, and Teachers College, as well as the offerings in this bulletin.

## **Summer Session**

O.T.M6663 x, y, z

Practicum II: evaluation and treatment of patients with physical disabilities

Ms. Miller (in charge), Professor Pang, and

clinical supervisors. O points.

Prerequisite: O.T.M6563 and all other 6000-level courses upon which this area of practice is based, or their equivalents. Supervised field experience with patients or clients, applying evaluative techniques, interpreting findings, planning and implementing treatment, and documenting results. Full time for three months.

The following elective may be taken following the preceding course:

O.T.M6680 x, y, z

Practicum III: special interest
Ms. Miller and clinical supervisors. 0 points.
Prerequisite: completion of all course
work and Practicums I and II. A field experience is individually planned to enrich

the student's background in accordance with his or her needs and interests. Opportunities are provided to develop clinical skills with specialty age or diagnostic groups (e.g., pediatrics, gerontology, hand dysfunction); or to develop indirect service skills in administration or research.

# MASTER OF SCIENCE DEGREE (ADVANCED-LEVEL) PROGRAMS

The goal of the program is to prepare professionals who are able to contribute to the expansion of occupational therapy knowledge, to integrate the occupational therapy belief system into practice, and to work autonomously or collaboratively to seek solutions to health problems.

- 1. As administrators: the graduate occupational therapists will be prepared to plan and implement innovative health care programs for specialized populations, to influence the formulation of health care legislation, and to participate in quality assurance programs.
- 2. As educators: the graduate occupational therapists will be able to fill existing vacancies in academic and clinical education programs at the undergraduate and graduate levels, to contribute to the expansion of occupational therapy knowledge, and to provide leadership for the continuing education needs of fellow professionals.

In addition, all graduates of the program will have a foundation in planning and conducting research independently or jointly with colleagues in other allied health professions. Those who specialize in gerontology will be able to direct their administrative, teaching, and research efforts particularly toward the needs of the elderly.

A full-time student can expect to complete this program in twelve cal-

endar months of classroom work, practicum experience, and independent study. The first term provides the foundation for the analysis of occupational therapy theories and for design of research. It also introduces the principles of administration or teaching and offers opportunity for electives. The second term emphasizes the supervisory aspects of either role and adds the practicum component to further exploration of theory. There is ongoing advisement for developing the thesis. The summer term is left free of classroom work to allow full-time effort to complete the thesis.

A part-time student must carry a minimum of 3 points a term in order to complete the program within the maximum time of five years permitted for all requirements, including the thesis. Since a number of courses have prerequisites, the part-time student must prepare a total plan of study in the first term to assure a logical sequence of content.

All students take the required core courses. All other courses except electives are taken in the student's area of role specialization in either education or administration, with or without the gerontology content. These courses are in Teachers College, the School of Public Health, or other graduate divisions of the University.

The practicum experiences for both specializations are individually designed to meet each student's interest and needs.

In administration, the practicum may be carried out in a health care facility where there is a need for consultation, problem solving, or program development.

In education, this may be done through teaching a unit of study in the entry-level program, as a unit of clinical instruction to students during fieldwork, or as a community education project. Either of these may incorporate the gerontology content. 34

A variety of content options for elective courses are available to increase the students' advanced knowledge base for research and teaching in occupational therapy. Courses in the areas of motor learning and neurophysiology are examples.

# Autumn Term

TI5021x and z (Teachers College) Methods of empirical research I Professor Sontag. 3 points.

O.T.M6570 and O.T.M6571 may be substituted for this course. An introduction to the methods of scientific inquiry, research planning, and techniques of making observations and analyzing and presenting data. Topics include methods of inquiry, the role of research in theory, formulating problems and hypotheses, sampling, measurements, and the design of empirical research. Opportunity to design research projects.

#### O.T.M8100x

Theory in a practice profession Professor Neuhaus and guest faculty. 3 points.

Presentation of theoretical foundations of occupational therapy. Examination of concepts and theories in current practice that reflect the link between activity and health. Formulation of theoretical model applicable to own practice.

#### O.T.M8103x

Supervision: approaches for specialized roles

Mrs. Brown. 2 or 3 points.

The supervisory relationship in education and middle management. Analysis and development of effective supervisory approaches and evaluation tools for student performance and personnel. Experiential laboratories using peer evaluation and critique. Assignments related to student's specialization.

# O.T.M8110x, y, z Thesis seminar

Professors Neuhaus and Schorow. 1 point. Group experience in development of research questions and preparation of thesis proposal. Peer review and critique of ideas. Introduction to use of resources available to students in preparing the pro-

posal. For each additional term required for completion of the proposal, students must register for *H.P.M8200* (0 points) and continue to participate in the seminar.

O.T.M8111x, y, z Thesis advisement

Faculty advisers. 1 point.
Following approval of thesis proposal, students register for thesis advisement with their faculty adviser each term until thesis is completed. Hours are mutually arranged between student and adviser.

H.P.M8200 x, y, z Research advisement

Faculty advisers. 0 points.
Students must register for 0 points of continued advisement for each additional term required for completion of the approved draft of the thesis.

# P.H.P6530x Issues and approaches in health administration

Professor Rosenberg. 3 points.
Lectures and readings on administrative problems and interventions that affect and are affected by all public health practitioners in seeking to improve health care delivery, health care, and health. These concepts are synthesized in small group discussions, a mid-term paper, and a final examination.

#### H.P.M8500x

Interdisciplinary collaboration in long-term care: a seminar and practicum

Professor Miller. 3 points.

Prerequisite: *H.P.M8301* or the instructor's permission. Models of health care for the elderly and the skills needed by professionals engaged in interdisciplinary activity. Seminar sessions with team-teaching include representatives from different disciplines. Knowledge relevant to the study and influence of interdisciplinary collaboration is achieved experientially with a problem-solving focus.

T4052x (Teachers College)
Designing curriculum and instruction
Professor Zumwalt. 3 points.

Models for designing curriculum and instruction. Students design curriculum for specific settings. Opportunities for individual and group consultation.

#### H.P.M8510x

Methods of teaching the adult learner

Professor Miller. 2 points.

Review of learning theories and their application to teaching of personnel with different backgrounds and levels of preparation. Development of specific learning modules for use in in-service training. Opportunity for practice and evaluation of teaching strategies: the case study method, role-plays, audio-visual aids, and problem solving.

Additional role specialization courses are listed on page 39 and in the bulletins of the School of Public Health and Teachers College.

#### Spring Term

O.T.M8101y

Advanced theories of intervention Professor Neuhaus and guest faculty. 3

points.

Prerequisite: O.T.M8100. Applicability of selected current neurobehavioral and psychosocial theories to the activities base of occupational therapy. Critical analysis of students' own practice. Synthesis through incorporation of applicable theoretical approaches into intervention programs.

#### O.T.M8105y Professional issues

Professor Neuhaus and associates. 2 points. Analysis of social, legal, political, and financial issues influencing occupational therapy practice. Introduction to methods of proposing and implementing change for existing constraints. Practice with specific skills needed for preparation of position paper, grant proposal, publishable article, or public education materials.

#### O.T.M8210x, y, z Practicum in education Professor Neuhaus. 3 points.

Supervised instructional experience in an academic or clinical setting. Students design and implement a learning experience for a selected population, involving objectives, methods, and evaluation in an area of particular interest to each student. Supplemented by biweekly seminar.

#### O.T.M8503y

Life skills reinforcement and its relationship to independent living for the elderly: independent study

Professor Miller. 2 points.

A field work experience in planning preventative and maintenance approaches to working with older persons in the community. Through an accompanying seminar that explores the developmental tasks of later life and identifies gaps in services, students design programs that will aid older persons to continue learning, adjust to losses, and capitalize on existing strengths.

#### O.T.M8520x, y

Practicum in administration
Instructor to be announced. 3 points.
H.P.M8500 may be substituted for this course. Supervised practice in administration of tasks in selected community agencies, hospitals, or institutions covering an area of particular interest to individual students. Supplemented by biweekly seminar.

#### P.H.P6040y

Overview of long-term care

Professor Toner. 3 points.

An overview of institutional, communitybased, and informal supports available within the system of long-term care of the elderly. Lectures, class discussion, and field visits.

#### P.H.P8030y

Assessment of intellectual, emotional, and physical well-being in the older adult

Professor Toner. 3 points.

Systematic review of strategies and instruments for the assessment and diagnosis of mental, physical, and social problems of older people. Videotapes of interviews are used for the development of skills in the use of assessment tools.

#### **Summer Session**

#### O.T.M8112z

Master's thesis

Faculty advisers. 4 points.

Students may register for this course only with adviser's permission. Development and completion of research project suitable for publication. Credit on acceptance of thesis.

H.P.M8301z Group dynamics for professionals in the health care fields

Professor Falk-Kessler. 3 points.
This course should be taken prior to H.P.M8500. Designed to teach health professionals the fundamentals of group dynamics, using principles that are appli-

cable to administrators in a variety of settings—from large organizations to small treatment teams. Exploration of different theoretical approaches through lecture, laboratory experience, and feature films. Development of observational skills and problem-solving techniques.

## Outline of the Programs

#### M.S. Degree (Entry-Level Program)

FIRST YEAR: AUTUMN TERM	POINTS	FIRST YEAR: SPRING TERM	POINTS
H.P.M6101: Human anatomy	3	O.T.M6107: Kinesiology H.P.M6322: Clinical	2
H.P.M6103: Nervous	2	psychiatry H.P.M6324: Clinical	2
system O.T.M6212: Group		pathology	4
process H.P.M6220: Growth and	2	O.T.M6440: Activities: therapeutic potential	2
development O.T.M6438: Activities:	3	O.T.M6553: Mental health	6
products and processes	3	O.T.M6571: Research	1
O.T.M6551: Professional foundations	2	seminar Total points	$\frac{1}{17}$
H.P.M6570: Methods of research	$\frac{2}{17}$		
Total points	17		
FIRST YEAR: SUMMER SESSION	POINTS		
O.T.M6653: Practicum I: mental health	0		
SECOND YEAR: AUTUMN TERM	POINTS	SECOND YEAR: SPRING TERM	POINTS
O.T.M6218: Supervision and management	2	O.T.M6448: Special therapeutic approaches	2
O.T.M6572: Research		O.T.M6564: Physical	
protocol P.H.P6530: Health	2	disabilities II O.T.M6555:	4
administration O.T.M6563: Physical	3	Rehabilitation in gerontology	4
disabilities I *TU4030: Computing	6	O.T.M6556: Occupational therapy in pediatrics	4
literacy	2-3	O.T.M6573: Master's	1
Total points	15–16	project Total points	$\frac{2}{16}$

<sup>\*</sup>Students with prior experience with computers must take an elective in place of TU4030.

SECOND YEAR: SUMMER SESSION	POINTS
O.T.M6663: Practicum II: physical disabilities Elective—O.T.M6680:	0
Practicum III: special interest	0

#### M.S. Degree (Advanced-Level) Programs: Full Time

For descriptions of courses with the prefix P, see the School of Public Health bulletin; with the prefixes TI, TD, or TY, see the Teachers College bulletin.

AUTUMN TERM: ADMINISTRATION AND EDUCATION POINT			
TI5021: Methods of research O.T.M8100: Theory in a practice profession O.T.M8103: Supervision O.T.M8110: Thesis seminar TY4052: Designing curriculum			3 3 2-3 1
or			
P6530: Health administration Electives (for Gerontology, strotal points			$   \begin{array}{r}     3 \\     4-5 \\     16-18   \end{array} $
SPRING TERM: ADMINISTRATION	POINTS	SPRING TERM: EDUCATION	POINTS
O.T.M8101: Intervention theories O.T.M8111: Thesis advisement O.T.M8105: Professional issues O.T.M8520: Practicum and seminar A minimum of one course from the School of Public Health Electives (for Gerontology, see below) Total points SUMMER SESSION O.T.M8112: Master's thesis H.P.M8301: Group	3 1 2 3 3 3 4 15–16 POINTS 4 3	O.T.M8101: Intervention theories O.T.M8111:Thesis advisement O.T.M8105: Professional issues O.T.M8210: Practicum and seminar A minimum of one course from Teachers College TY or TD Department Electives (for Gerontology, see below) Total points	3 1 2 3 3 3 4 15–16
dynamics: professionals  GERONTOLOGY (WITH ADMINIS		EDUCATION)	
AUTUMN TERM	POINTS	SPRING TERM	POINTS
H.P.M8500: Interdisciplinary collaboration: long-term care H.P.M8510: Methods of teaching the adult learner	3	P6040: Overview of long-term care O.T.M8503: Life skills reinforcement P.H.P8030: Assessment of well-being	3 2 3

#### Required Core Courses

T15021. Methods of empirical research (3 points)

O.T.M8100. Theory in a practice profession (3 points)

O.T.M8101. Advanced theories in intervention (3 points)

O.T.M8105. Professional issues (2 points)

O.T.M8110. Thesis seminar (1 point)

O.T.M8111. Thesis advisement (1 point)

O.T.M8112. Master's thesis (4 points)

#### Role Specialization Courses

OCCUPATIONAL THERAPY ADMINISTRATION

P6530. Issues and approaches in health administration (3 points)

O.T.M8103. Supervision (2 or 3 points) O.T.M8520. Practicum and seminar in administration (3 points)

or

H.P.M8500. Seminar and practicum in long-term care (3 points)

and a minimum of one of the following P courses:

P6503. Introduction to health economics (3 points)

P.H.P6011. Public health law (2 points)

P6544. Health care financial management (3 points)

P6560. Organizational theories and health services (3 points)

P8510. Assessment of health care (3 points)

P6509. Health management techniques (3 points)

Electives (8 points, of which 3 points are recommended in area of administration)

#### OCCUPATIONAL THERAPY EDUCATION

TY4052. Designing curriculum and instruction (3 points)

O.T.M8103. Supervision (2 or 3 points)
O.T.M8210. Teaching practicum and seminar (3 points)

and a minimum of one of the following TD, TY, or TU courses:

TD4011. Curriculum and instruction in higher education (3 points)

TD4051. How adults learn (3 points) TD5055. Staff development and training (3 points)

TY4002. Basic course in theory of curriculum design (3 points)

TY4001. Basic course in research on teaching (3 points)

TU4083. Instructional technology and media systems (3 points)

Electives (8 points, of which 3 points are recommended in area of education)

### Hospitals and Agencies Affiliated for Field Work Education

The following clinical centers, together with students in the program and faculty members, constitute the Occupational Therapy Clinical Council of Columbia University. Placements in field work are chosen from among these centers.

A. HARRY MOORE LABORATORY SCHOOL, JERSEY CITY, N.J.

Ernest C. Montefusco *Principal* 

Michael Hann, M.D. Attending Orthopedic Physician Dorothy McD. Ftikas, O.T.R. Chief Occupational Therapist

MONTEFIORE MEDICAL CENTER, HOSPITAL OF ALBERT EINSTEIN DIVISION, LUBIN REHABILITATION CENTER, BRONX, N.Y.

Samuel A. Levine, M.D. *Director* 

Sherry Husney, O.T.R. Chief Occupational Therapist

BELLEVUE HOSPITAL CENTER, NEW YORK, N.Y.

Ira Clark
Acting Director
Bruce Grynbaum, M.D.
Medical Director
Ivy S. Beloff
Associate Director

Dorothy Bergeron, O.T.R. Chief Occupational Therapist

Chief Occupational Therapist

BETH ABRAHAM HOSPITAL, BRONX, N.Y. William Frohlich Director
Flora Tabaddor, M.D. Director of Rehabilitation Medicine
Helena Schanzer, M.S., O.T.R.

BETH ISRAEL MEDICAL CENTER, NEW YORK, N.Y.

James T. Demopoulos, M.D.

Director, Department of Rehabilitation

Medicine

Helen Lopez, O.T.R. Chief Occupational Therapist (Physical Medicine)

BLYTHEDALE CHILDREN'S HOSPITAL, VALHALLA, N.Y.

Robert Stone
Administrator
Niels I. Low, M.

Niels L. Low, M.D. Clinical Director

Yasoma B. Challenor, M.D. Chief, Rehabilitation Medicine

Adele Kapp, O.T.R.
Chief Occupational Therapist
Diana Chu Morgan, O.T.R.
Assistant Chief and Student Program
Coordinator

BRAINTREE HOSPITAL, BRAINTREE, MA. Ernest J. Broadbent, M.P.H. Administrator
James S. Liljestrand, M.D. Medical Director
Ann P. Swanborg, O.T.R. Assistant Director of Occupational

Therapy
BRONX MUNICIPAL HOSPITAL CENTER,
JACOBI HOSPITAL, AND KENNEDY
CENTER, BRONX, N.Y.

Matei S. Roussan, M.D.
Professor and Acting Chairman,
Department of Rehabilitation Medicine
Susan O. Gans, M.S., O.T.R.
Chief of Occupational Therapy
Manuel Wertman

Manuel Westman
Director of Activity Therapy
(Psychiatry)

BURKE REHABILITATION CENTER, WHITE PLAINS, N.Y.
Fletcher H. McDowell, M.D.
Executive Medical Director

Peter H. Stern, M.D.

Director of Rehabilitation Medicine
Carol J. Gryde, M.A., O.T.R.

Director, Occupational Therapy

CABRINI HEALTH CARE CENTER, NEW YORK, N.Y.

John Vasile, M.D. Medical Director, Rehabilitation Medicine

Celia Vigliotta, O.T.R. Director of Occupational Therapy (Rehabilitation Medicine)

THE CHURCHILL SCHOOL, NEW YORK, N.Y.

Mary Newmann Director

Nancy Carroll, M.S., O.T.R. Chief Occupational Therapist

DOWNSTATE MEDICAL CENTER, BROOKLYN, N.Y.

Mary Piccione Acting Director

Sang Bae Ha, M.D.

Acting Chairman of Rehabilitation

Medicine

Brenda Gibbs, O.T.R. Chief Occupational Therapist (Rehabilitation Medicine)

Eugene Feigleson, M.D. Professor and Chairman, Department of Psychiatry

To be appointed Chief Occupational Therapist (Psychiatry)

COTTAGE HOSPITAL OF GROSSE POINTE GROSSE POINTE FARMS, MI

Ralph Wilgarde Administrator

Sheila Mack, M.S., O.T.R. Director of Occupational Therapy

ERICH LINDEMANN MENTAL HEALTH CENTER, BOSTON, MA. Jeffrey A. Keilson

Harbor Area Director
Barbara B. Middleton, O.T.R.
Chief Occupational Therapist

FORT WASHINGTON SENIOR CENTER, NEW YORK, N.Y. Igal Jellinek Executive Director

GOLDWATER MEMORIAL HOSPITAL, NEW YORK, N.Y.

I. Bernard Hirsch Executive Director

Matthew Lee, M.D.

Director, Rehabilitation Medicine Service

Judith Wasserman, M.A. O.T.R. Director of Occupational Therapy

GOUVERNEUR HOSPITAL, NEW YORK, N.Y.

Alan Roseblut

Executive Director

D. H. Brooks, M.D.

Medical Director of Occupational Therapy

Carmen Bousquet, O.T.R. Chief Occupational Therapist

GRACIE SQUARE HOSPITAL, NEW YORK, N.Y.

Robert Campbell, M.D. *Medical Director* 

Frances Hamburg, M.S., D.T.R. *Director, Therapeutic Activities*Leslie Cooper, O.T.R.

Assistant Director, Therapeutic Activities; Director, Student Program

HARLEM HOSPITAL CENTER, NEW YORK, N.Y.

Charles Windsor Director

Herbert Thornhill, M.D. Director of Rehabilitation Medicine Sandhya Zarapkar, M.A., O.T.R. Chief Occupational Therapist

HELEN HAYES HOSPITAL, WEST HAVERSTRAW, N.Y. Robert Lindsay, M.D. Medical Director Deborah Juarbe, O.T.R.

Deborah Juarbe, O.T.R. Chief Occupational Therapist

HOSPITAL FOR SPECIAL SURGERY, NEW YORK, N.Y.

Donald Broas
Executive Director
Leon Root, M.D.

Medical Director of Rehabilition

Judith Kurz

Director, Rehabilitation Services

Rhonda Meersand, O.T.R. Chief Occupational Therapist

HUDSON GUILD-FULTON SENIOR CENTER, NEW YORK, N.Y.

Fritzie Kort Director

ISABELLA GERIATRIC CENTER, NEW YORK, N.Y.

Thomas Coughlin

Director

Arthur Lennon, M.D. Director of Rehabilitation Medicine Linda Hearns, O.T.R.

Chief Occupational Therapist

IRENE WALTER JOHNSON
REHABILITATION INSTITUTE AT
WASHINGTON UNIVERSITY MEDICAL
CENTER, ST. LOUIS, MISSOURI
Carolyn Baum, M.A., O.T.R.,

F.A.O.T.A.

Director of Occupational Therapy

KESSLER INSTITUTE FOR

REHABILITATION, WEST ORANGE, N.J. Kenneth Aitchison

Executive Director

Richard Sullivan, M.D.

Medical Director

Felice Celikyol, M.A., O.T.R. Director, Occupational Therapy

KINGS COUNTY HOSPITAL MEDICAL CENTER, BROOKLYN, N.Y.

Ira Clark

Chief Executive Officer/Regional

Administrator

Sang Bae Ha, M.D.

Acting Medical Director

Virginia O'Brien, O.T.R. Chief Occupational Therapist

LONG ISLAND COLLEGE HOSPITAL, S.S. LAMM INSTITUTE FOR DEVELOPMENTAL DISABILITIES, BROOKLYN, N.Y.

Martin L. Fisch, Ph.D. Executive Director

S. Lamm, M.D.

Medical Director

Gita Porway, M.A., O.T.R. Supervisor, Occupational Therapy

LONG ISLAND JEWISH-HILLSIDE MEDICAL CENTER HILLSIDE DIVISION, GLEN OAKS. N.Y.

Robert K. Match, M.D.

Medical Director

Seymour Cohen, M.D. Dean of Clinical Campus

Estelle Douglas, C.R.C.

Director of Activities Therapy

Mary Donohue, O.T.R.

Coordinator, Clinical Education and Research for Occupational Therapy

LONG ISLAND JEWISH-HILLSIDE MEDICAL CENTER, JEWISH INSTITUTE FOR GERIATRIC CARE, NEW HYDE PARK, N.Y.

Seymour Cohen, M.D.
Vice President of Education and
Research and Dean of Clinical Campus
at LIJ/HMC

David Glaser

Executive Vice President of J.I.G.C.

Conn Foley, M.D. Director of J.I.G.C.

Charulata Badlani, M.D.

Medical Director of Rehabilitation Medicine at J.I.G.C.

Betty Joblove, O.T.R.

Chief Occupational Therapist

SPAULDING REHABILITATION HOSPITAL, BOSTON, MA.

Manule Lipson, M.D.

Director

Nancy L. Walsh, O.T.R. Chief Occupational Therapist

MASSACHUSETTS MENTAL HEALTH CENTER, BOSTON, MA. Myles F. Shoke, M.D.

Area Director

Robin Bach, M.S., O.T.R. Director of Occupational Therapy

McLEAN HOSPITAL, BELMONT, MA. Francis de Marneffe, M.D. Director

Alan F. Schatzberg, M.D. Interim Psychiatrist in Chief Frances Palmer, M.S., O.T.R. Director of Rehabilitation Services

MEMORIAL-SLOAN KETTERING CANCER CENTER, NEW YORK, N.Y.

Roger Parker Vice President for Administration Michael Nardone, M.S., O.T.R. Chief Occupational Therapist

METROPOLITAN HOSPITAL CENTER, NEW YORK MEDICAL COLLEGE, NEW YORK, N.Y.

Harriet Dronska Director

Catherine Hinterbuchner, M.D. Professor and Chairman of Rehabilitation Medicine, Chief of Service

Rina Chawla, O.T.R. Chief Occupational Therapist

MONTEFIORE MEDICAL CENTER, NEW YORK, N.Y.

Carl Eisdorfer, Ph.D.

President

John Iazzetti, M.D. Medical Director

Cathy Allis, O.T.R.

Director of Occupational Therapy
(Physical Medicine)

Carolyn Brenner, O.T.R. Director of Occupational Therapy (Psychiatry)

MOUNT SINAI HOSPITAL, NEW YORK, N Y

Rehabilitation

Lawrence H. Wisham, M.D. Director of Rehabilitation Medicine Serena Berger, M.A., O.T.R. Acting Chief of Occupational Therapy (Physical Medicine)

Psychiatry

Marvin Stein, M.D.
Director, Department of Psychiatry
Robert Yankowitz, Ph.D.
Director of Psychiatric Rehabilitation
Robyn Abramson, O.T.R.
Supervisor, Child-Life Services

NASSAU COUNTY MEDICAL CENTER,
EAST MEADOW, N.Y.
Donald Eisenberg
Executive Director
Lawrence W. Friedmann, M.D.
Chairman, Rehabilitation Medicine
Marion B. Miller, O.T.R.
Chief Occupational Therapist

NEW ROCHELLE HOSPITAL, NEW ROCHELLE, N.Y.
Jerome Gristina, M.D.
Director, PM&R
Alice DeLuise-Massa, O.T.R.
Chief Occupational Therapist

NEW YORK HOSPITAL, NEW YORK, N.Y.
D. Thompson, M.D.
Medical Director
W. Nagler, M.D.
Medical Director, Department of
Rehabilitation Medicine
Diane Smook, O.T.R.
Chief of Occupational Therapy
Payne Whitney Psychiatric Clinic
Robert Michels, M.D.
Chairman, Department of
Psychiatry

Susan B. Finc, M.A., O.T.R., F.A.O.T.A.

Director, Therapeutic Activities

Westchester Division

Diane Shapiro, M.A., O.T.R. Director, Department of Therapeutic Activities

Daphne Piegrome, M.P.A., O.T.R. Director of Training, Therapeutic Activities

NEW YORK MEDICAL COLLEGE, NEW YORK, N.Y.

Center for Chronic Disease, Bird S. Coler Hospital, Roosevelt Island, N.Y.

Joseph Kramer Acting Executive Director Daoud B. Karam, M.D. Director, Department of Rehabilitation Medicine Carolyn B. Aggarwal, O.T.R. Chief Occupational Therapist

NEW YORK STATE DEPARTMENT OF MENTAL HYGIENE

Steven Katz, M.D. Commissioner

New York State Psychiatric Institute, New York, N.Y.

Herbert Pardes, M.D. Director Barbara Bouley, M.A., O.T.R. Head Occupational Therapist

NORWALK HOSPITAL, NORWALK, CT Department of Medicine, Section of Physical Medicine and Rehabilitation

Claudio Petrillo, M.D. Chief of Physical Medicine and Rehabilitation Linda Morgan, O.T.R. Supervisor, Occupational Therapy

NORTH CENTRAL BRONX HOSPITAL, BRONX, N.Y. John Iazzetti, M.D. Medical Director Judythe Burton, O.T.R. Supervisor, Occupational Therapy

NYACK HOSPITAL, NYACK, N.Y. James M. Dawson President Karen Suess, O.T.R.

Chief Occupational Therapist

ORTHOPEDIC INSTITUTE, NEW YORK, N.Y. Alfred Grant, M.D. Department of Orthopaedics Sally Poole, M.A., O.T.R.

Director of Occupational Therapy

Thomas Foley Director Francis J. Foca, M.D. Director, Rehabilitation Services Nancy Karl, O.T.R. Chief Occupational Therapist

OVERLOOK HOSPITAL, SUMMIT, N.J.

PACIFIC MEDICAL CENTER SEATTLE, WA Dr. Richard Thompkins Executive Director Henry F. Warden III Deputy Executive Director Sue McMillan, O.T.R.

Chief of Occupational Therapy

PHELPS MEMORIAL HOSPITAL CENTER, PHELPS MENTAL HEALTH CENTER, NORTH TARRYTOWN, N.Y. Alton Noves

Director Roger Kalhovd, M.D. Medical Director, Department of Psychiatry Ruthann Liptak, M.S., O.T.R. Occupational Therapist

RIVERDALE MENTAL HEALTH CENTER, BRONX, N.Y. Helen Myers, M.D. Director Joyce Pilsner Executive Director Sheila Howard, R.N.

Assistant Director, Continuing Treatment Program Sherill Wadler, O.T.R. Chief Occupational Therapist

ROBERT WOOD JOHNSON JR. REHABILITATION INSTITUTE, JOHN F. KENNEDY MEDICAL CENTER, EDISON, N.J.

Joseph Sherber Director Bernard Sandler Medical Director

Patricia Gilchrist, O.T.R. Director of Occupational Therapy ST. MARY'S HOSPITAL, HOBOKEN, N.J.
Sister Grace Frances Strauber
Executive Director
Roberta Lee, O.T.R.
Chief Occupational Therapist

ST. LUKE'S-ROOSEVELT HOSPITAL CENTER, NEW YORK, N.Y. Gary Gambuti President Psychiatry

David MacDonald, M.D. Acting Director

Barbara Henryson, M.A., O.T.R. Director, Occupational Therapy and Recreation Therapy, St. Luke's Site Elinor Cohen, O.T.R. Senior Occupational Therapist (Psychiatric Service), Roosevelt Site

Rehabilitation Medicine Patrick Fazzari, M.D. Director

Margaret Fishbune, M.A., O.T.R. Chief Occupational Therapist
Julie Corbett, M.S., O.T.R. Occupational Therapy Supervisor, Rehabilitation Service, St. Luke's Site

ST. VINCENT'S HOSPITAL AND MEDICAL CENTER OF NEW YORK, NEW YORK, N.Y. Sister Margaret Sweeney Executive Director
Joseph T. English, M.D. Director, Department of Psychiatry Anne Mazur-Robinson, M.A., O.T.R. Chief, Therapeutic Activities and Vocational Rehabilitation Service, Department of Psychiatry Samuel Sverdlik, M.D. Director, Rehabilitation Medicine Helene Lee, O.T.R. Chief Occupational Therapist, Rehabilitation Medicine

SILVER HILL FOUNDATION, NEW CANAAN, CT

Laura Mayerduffy, M.A., O.T.R. Head of Department of Occupational Therapy

THE PRESBYTERIAN HOSPITAL, NEW YORK, N.Y.

Thomas Q. Morris, M.D. President
John Downey, M.D. Chairman, Department of

Rehabilitation Medicine Frances Kraver, M.A., O.T.R. Chief Occupational Therapist

UNIVERSITY HOSPITAL, STONY BROOK, N.Y.

Francine Smith, O.T.R. Supervising Occupational Therapist

VETERANS ADMINISTRATION HOSPITALS Bronx, New York

K. L. Mulholland, Jr. *Director* 

Andrew A. Fischer, M.D.
Chief, Rehabilitation Medicine
Andrea Scher, O.T.R.
Chief, Occupational Therapy
New York, N.Y.

James S. Dooley
Director
Edward J. Lorenze, M.D.
Chief, Rehabilitation Medicine
Lillian D. Bennett, O.T.R.
Chief, Occupational Therapy

WESTCHESTER COUNTY MEDICAL CENTER, VALHALLA, N.Y. Mental Retardation Institute

Amsley Bacon-Prue
Executive Director
Emanuel Chusid, M.D.
Medical Director
Chris Moreland, M.S., O.T.R.
Director of Occupational Therapy

## Registration and Expenses

## Statement of Nondiscriminatory Policies

The University is required by certain Federal statutes and administrative regulations to publish the following statements:

Consistent with the requirements of Title IX and the Education Amendments of 1972, as amended, and Part 86 of 45 C.F.R., the University does not discriminate on the basis of sex in the conduct or operation of its education programs or activities (including employment therein and admission thereto). Inquiries concerning the application of Title IX and Part 86 of 45 C.F.R. may be referred to Ms. Rosalind S. Fink, the Director of the University's Office of Equal Opportunity and Affirmative Action (305 Low Memorial Library, New York, N.Y. 10027, telephone 212-280-5511), or to the Director, Office for Civil Rights (Region II), 26 Federal Plaza, New York, N.Y. 10007.

Columbia University admits students of any race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the University. It does not discriminate on the basis of race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other University-administered programs.

Consistent with the requirements of Section 504 of the Rehabilitation Act of 1973, as amended, and part 84 of 45 C.F.R., the University does not discriminate on the basis of handicap in admission or access to, or employment in, its programs and activities. Section 503 of the Rehabilitation Act

of 1973 requires affirmative action to employ and advance in employment qualified handicapped workers.

The University in addition desires to call attention to other laws and regulations that protect employees, students, and applicants. Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination on the basis of race, color, or national origin in programs or activities receiving Federal financial assistance. Title VII of the Civil Rights Act of 1964, as amended, prohibits employment discrimination because of race, color, religion, sex, or national origin. Executive Order 11246, as amended, prohibits discrimination in employment because of race, color, religion, sex, or national origin and requires affirmative action to ensure equality of opportunity in all aspects of employment. In addition, New York Human Rights Law, Article 15, Executive Law Section 296 prohibits discrimination in employment because of marital status.

The Equal Pay Act of 1963 prohibits discrimination on the basis of sex in rates of pay. The Age Discrimination in Employment Act of 1967, as amended, prohibits discrimination in employment on the basis of age.

The Columbia University Senate on December 1, 1978, passed a resolution announcing its general educational policy on discrimination which reaffirms the University's commitment to nondiscriminatory policies in the above-mentioned categories, as well as its policy not to discriminate on the basis of sexual orientation.

Section 402 of the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, prohibits job discrimination and requires affirmative action to employ and advance in employment qualified special dis-

abled veterans and veterans of the Vietnam era.

All employees, students, and applicants are protected from coercion, intimidation, interference or discrimination for filing a complaint or assisting in an investigation under any of the foregoing policies and laws.

The University's Office of Equal Opportunity and Affirmative Action has also been designated to coordinate the University's compliance activities under each of the programs referred to above. Any employee who believes that he or she has been denied equal opportunity should contact this Office, which will investigate complaints and counsel employees on questions relating to equal opportunity and affirmative action.

The University's Equal Opportunity Office has also been designated to coordinate the University's compliance activities under each of the

programs referred to above.

#### Reservation of University Rights

This bulletin is intended for the guidance of persons applying for or considering application for admission to Columbia University and for the guidance of Columbia students and faculty. The bulletin sets forth in general the manner in which the University intends to proceed with respect to the matters set forth herein, but the University reserves the right to depart without notice from the terms of this bulletin. This bulletin is not intended to be and should not be regarded as a contract between the University and any student or other person.

#### REGISTRATION

Before attending University courses, each student must register in person during the registration period (see Academic Calendar). The registration procedure is as follows:

- 1. Students report to the Administrative Offices of Physical Therapy and Occupational Therapy at the College of Physicians and Surgeons, 630 West 168th Street, and fill out various forms giving information required for University records.
- 2. They have their programs approved by the Director.
- 3. They take their completed forms to the Office of Student Information Services, sign a Retail Installment Credit Agreement, and pay their fees, if desired, in the Student Accounting Division. (For more detailed information, see Fees.)

The Office of Student Information Services is open Monday through Fri-

day, 9 a.m. to 4:30 p.m.

All students are asked to give Social Security numbers when registering in the University. However, Social Security numbers are required of foreign students only when those students will be receiving payment from the University. Foreign students should consult the Office of International Student Services, 208 Lewisohn, for further information. Other students who do not have Social Security numbers should obtain them from their local Social Security offices well in advance of registration.

Students who are not citizens of the United States and who need authorization for special billing of tuition and/or fees to foreign institutions, agencies, or sponsors should go to the International Student Adviser with two copies of the sponsorship letter. Special billing authorization is required of students whose bills are to be sent to a third party for pay-

ment.

#### English Language Placement Test

Students whose first language is not English must take the English Language Placement Test before they register for courses. Performance on this examination determines whether or not further training in the language is needed. Students who do not meet the standards of the University may be required to follow a program of English before beginning professional courses or, if time permits, in conjunction with professional courses. No point credit is given for these courses, and their addition to the program of study lengthens the time necessary to earn the degree.

An appointment to take this test may be made in person at the Office of the American Language Program, 505 Lewisohn, on the main campus at 116th Street and Broadway. To obtain the test results, the student should consult the adviser for the English for International Students program, 505 Lewisohn.

#### Changes in Programs of Study

Once registered, students may drop or add courses or change sections by filing a formal change-of-program application with the Office of Student Information Services during the change-of-program period each term (see *Academic Calendar*). All such changes must first be approved by each student's adviser.

Students may drop courses after the change-of-program period by following the same procedure; however, for courses dropped after the last day for change of program in each term, no adjustment of tuition will be made. Autumn term courses may be dropped no later than November 14, spring term courses no later than March 20. Failure to attend classes or unofficial notification to the instructor does not constitute dropping a course and will result in a failing grade in the course.

#### **AUDITING COURSES**

Degree candidates in good standing who are enrolled for a full-time program in the current term may audit one or two courses (except during the Summer Session) in any division of the University without charge by filing a formal application in the Office of Student Information Services (Black Building, Room 141) during the change-of-program period. Applications require (a) the certification of the Office that the student is eligible to audit and (b) the approval of the dean of the school in which the courses are offered.

Elementary language courses, laboratory courses, studio courses, applied music courses, and seminars are not open to auditors; other courses may be closed because of space limitations. In no case will an audited course appear on a student's record, nor is it possible to turn an audited course into a credit course by paying the fee after the fact. Courses previously taken for credit may not be audited.

#### REGULATIONS

According to University regulations, each person whose registration has been completed will be considered a student of the University during the term for which he or she is registered unless the student's connection with the University is officially severed by withdrawal or otherwise. No student registered in any school or college of the University shall at the same time be registered in any other school or college, either of Columbia University or of any other institution, without the specific authorization of the dean or director of the school or college of the University in which he or she is first registered.

The privileges of the University are not available to any student until he or she has completed registration. A student who is not officially regis-

tered for a University course may not attend the course unless granted auditing privileges (see Auditing Courses, above). No student may register after the stated period unless he or she obtains the written consent of the appropriate dean or director.

The University reserves the right to withhold the privilege of registration or any other University privilege from any person with unpaid charges to the

University.

## Attendance and Length of Residence

No degree will be granted to a student who has not registered for and attended at the University courses of instruction equivalent to at least one academic year of full-time work.

Students are held accountable for absences incurred owing to late enrollment and are expected to attend punctually each class or laboratory exercise in each course. For credit toward the degree, regular attendance is required in addition to the proficiency attested by classwork and examination.

#### RELIGIOUS HOLIDAYS

It is the policy of the University to respect its members' observance of their major religious holidays. Officers of administration and of instruction responsible for the scheduling of required academic activities or essential services are expected to avoid conflict with such holidays as much as possible. Such activities include examinations, registration, and various deadlines that are a part of the Academic Calendar. (See Academic Calendar for dates of religious holidays.)

Where scheduling conflicts prove unavoidable, no student will be penalized for absence due to religious reasons, and alternative means will be sought for satisfying the academic requirements involved. If a suitable arrangement cannot be worked out be-

tween the student and the instructor involved, the appropriate dean or director should then be consulted. If an additional appeal is needed, it may be taken to the Provost.

#### Academic Discipline

The continuance of each student upon the rolls of the University, the receipt of academic credits, graduation, and the conferring of any degree are strictly subject to the disciplinary

powers of the University.

A guide to student rights and responsibilities is available to occupational therapy and physical therapy students and provides details concerning the due process procedures which are required when a charge is made against a student. The guide also describes the procedures which are to be followed by a student who has a grievance.

#### Conduct

All members of the University community, its visitors and guests, are governed by the Rules of University Conduct, which apply to all demonstrations, including rallies and picketing, that take place on or at a University facility. It is the student's responsibility to be aware of all provisions, regulations, and procedures contained in the Rules. Copies are available in the Office of the University Senate, 406 Low Memorial Library.

#### **GRADES AND CREDIT**

The student's performance in a course is reported according to the following grades (may be suffixed by + or -): A, excellent; B, good; C, fair; and F, failure. A, B, and C are passing grades counting for credit toward the degree and accepted as the basis for advancement to a higher course. A student who receives a mark of F in a required course must

repeat that course, and may do so

only one time.

The mark of ABS (absent) is given only to those students whose attendance and progress have been satisfactory throughout the term and who for imperative reasons are unable to take the final examination. Permission to be absent from the final examination must be granted by the instructor not later than the day of the examination. If the ABS is not removed by the end of the following academic year, it will remain as an ABS on the transcript.

The mark of INC (incomplete) is given only to a student who requests it from the instructor in writing and who has satisfactorily met all the requirements of a course but who has been compelled for reasons beyond his or her control to postpone certain assigned papers or reports. If the outstanding work is not completed within one calendar year from the date of the end of term in which the incomplete was received, the grade will remain as a permanent incomplete on the transcript. If the assignments are completed within the year and a grade submitted, the INC will be deleted and the final grade entered in the permanent grade column.

The mark of P (passed) is given for clinical and field work education. A limited number of other courses are offered for a P (passed) grade or H (honors) for outstanding achievement.

The mark of R (registered for the course; no qualitative grade assigned) is given only to those students who indicate, when they register, their intention to take the course for R credit or who file notice of change of intention with the Office of Student Information Services no later than the last day for change of program. If a student registers for R credit, he or she is not required to take examinations, write papers, or otherwise do the required work of the course. Students may elect R credit only for courses in

excess of degree requirements. It should be understood that degree credit for such courses will not be awarded and that courses taken for R credit may not be repeated for examination credit.

## Academic Standards for Physical Therapy

Full-time students can expect to complete the program in two academic years and the intervening summer. In order to continue in good standing, students, whether enrolled full- or part-time, must maintain an average term grade of B-(2.67 points).\* To continue in the program the student must restore his or her cumulative average to B – by the end of the following term. A student failing more than one course in one term may not continue in the program. Any student enrolled must complete at least one third (20 points) of the program in an academic year in order to maintain satisfactory progress. Transcripts of students' records are issued at the end of each term. In instances where a student may withdraw from the program, be granted a leave of absence, or interrupt the program of study because of mitigating circumstances, a determination of satisfactory progress will be subject to faculty reveiw.

The records of students receiving a C- grade are also subject to review. The result could be denial of permission to register for further study in the physical therapy program. No more than 4 points of C- may be credited toward a degree.

Required courses may not be taken for pass/fail unless they are specifically designated or unless individual

<sup>\*</sup>In the computation of grade averages, quality points are awarded on the following scale: A+=4.33, A=4.00, A-=3.67, B+=3.33, B=3.00, B-=2.67, C+=2.33, C=2.00, C-=1.67, F=0. The grades of P and H are not included.

permission is obtained from the phys-

ical therapy faculty.

Elective courses offered by Columbia University may be taken for pass/fail or for a letter grade. The students' selection of either grade option is subject to the instructor's approval during the first three class sessions.

## Academic Standards for Occupational Therapy

**ENTRY-LEVEL STUDENTS** 

Full-time students can expect to complete the program in twenty-four calendar months and part-time students in thirty-six months. In order to continue in good standing, whether enrolled full- or part-time, students must maintain an average term grade of B - (2.67 points).\* Students who fall below this average will be placed on academic probation. To continue in the program the student must restore his or her cumulative average to B – by the end of the following term. A student failing more than one course in one term may not continue in the program. All students must complete at least one fourth (15 points) of the program in an academic year in order to maintain satisfactory progress. Transcripts of students' records are issued at the end of each term. In instances where a student may withdraw from the program, be granted a leave of absence, or interrupt the program of study because of mitigating circumstances, a determination of satisfactory progress will be subject to faculty review.

No more than 3 points of C- may be credited toward a degree.

Required courses may not be taken

\*In the computation of grade averages, quality points are awarded on the following scale: A + + 4.33, A = 4.00, A = -3.67, B + = 3.33, B = 3.00, B = -2.67, C + -2.33, C = 2.00, C = 1.67, F = 0. The grades of P and H are not included.

for pass/fail unless they are specifically designated, or unless individual permission is obtained from the Director.

Elective courses offered by Columbia University may be taken for pass/ fail or for a letter grade. The student's election of either grade option is subject to the instructor's approval. Students may transfer a maximum of 3 semester credits of elective course work from another regionally accredited college or university toward satisfying their degree requirements. Courses must carry graduate credits and must be evaluated with a letter grade. Requests should be submitted in writing to the Director with a university catalog that contains the course description.

#### ADVANCED-LEVEL STUDENTS

Full-time students can expect to complete the program in twelve calendar months. Part-time students will progress according to the individual course load per term. In order to continue in good standing, whether enrolled full- or part-time, students must maintain a cumulative average of B (3.00 points).\* Students who fall below this average will be placed on academic probation. To continue in the program the student must restore his or her cumulative average to B by the end of the following term. A student failing more than one course may not continue in the program. Any student enrolled full time must complete at least one fourth (9) points) of the program in an academic year in order to maintain satisfactory progress. All part-time students must complete at least one fifth of the program in an academic year in order to maintain satisfactory progress. Since part-time students must carry a minimum of 3 points per term on a continuous basis until all course work has been completed, the actual number of required points will be 9 per year for at least three of the five years permitted for completion of all

degree requirements, including the thesis. Transcripts of students' records are issued at the end of each term. In instances where a student may withdraw from the program, be granted a leave of absence, or interrupt the program of study because of mitigating circumstances a determination of satisfactory progress will be subject to faculty review.

Required courses may not be taken for pass / fail unless individual permission is obtained from the Di-

rector.

#### **FEES**

The following fees are prescribed by statute and are subject to change at the discretion of the Trustees. The fees below are for the academic year 1984–1985. Students can expect an increase for the 1985-1986 academic

University charges such as tuition and fees, and residence halls and board plans are due and payable in full by the date announced before the beginning of each term.\* The full amount of any charge may be paid when due without penalty or payment may be made in installments. If installment payments are made, a FINANCE CHARGE is assessed on amounts not paid by the due date on the initial bill received prior to registration and thereafter as indicated on subsequent monthly bills. In either event, however, the student is required to sign a Retail Installment Credit Agreement at the time of registration which sets forth the terms and conditions of payment. All

charges must be paid by the end of the term.

It is the policy of the University to withhold diplomas, certificates, and transcripts until all financial obligations have been met. Candidates for graduation are urged to pay their bills in full at least one month prior to graduation.

In the event a diploma, certificate, or transcript is withheld because of an unpaid bill, a student will be required to use a certified check, money order, or cash to release any of the aforementioned documents.

#### Tuition

The following tuition charges were in effect for the 1984–1985 academic vear:

305.00

For all courses, per point

With the proviso that each autumn and each spring term the fee for a full-time program (15 to 19 points inclusive) is 4.576.00 305.00 For each point over 19 For summer clinical experience 12.00

Tuition for courses offered by Teachers College, which is not part of the Columbia University corporation, will be charged at the per point or course rate established by that school only for students registering for less than 15 points per term.

#### Health Service and Hospital Insurance Fees

The following fees were in effect for the 1984–1985 academic year:

For all full-time students Health service fee, per year (September 1-August 31) \$310.00 Hospital insurance premium, per year (September 1–August 31) 245.00

<sup>\*</sup>However, the newly admitted degree candidate in the Programs in Physical and Occupational Therapy is required by the Programs, upon acceptance, to submit an acceptance fee to reserve a place in the entering class. This amount is credited toward tuition when the student registers. See under Admission Requirements for each program.

The student health service fee contributes to the cost of operating the Student Health Service. The hospital insurance fee pays the annual premium of the Associated Hospital Service of New York. Participation in these programs is compulsory for all full-time students; students who already carry hospital insurance, however, will be charged the health service fee only. Part-time students are encouraged to participate in the combined health plan. Upon payment of additional fees, students can acquire hospital insurance coverage for their dependents and the latter are eligible to receive the benefits of the health service program. Students should consult the Office of Student Information Services, Black Building, Room 141, for further information on dependent coverage.

The Student Health Service, which holds daily office hours, is on the street level of Bard Haven Tower 1

(60 Haven Avenue).

#### Application Fees and Late Fees

Application for admission
Late application, or late
renewal of application,
for a degree or certificate

\$35.00

#### Late Registration Fees

During late registration \$50.00 After late registration 100.00

## Withdrawal and Adjustment of Fees

A student in good academic standing who is not subject to discipline will always be given an honorable discharge if he or she wishes to withdraw from the University. Withdrawal is defined as the dropping of one's entire program in a given term as opposed to dropping a portion of one's program (see Registration and Expenses—Changes in Programs of

Study). If the student is under twenty-one years of age, his or her parent or guardian must first give consent in

writing to the Director.

Any adjustment of the tuition that the student has paid is reckoned from the date on which the Office of Student Information Services receives the student's written notification. Application fees, late fees, and special fees are not subject to rebate. Up to and including the second Saturday after the first day of classes tuition will be retained in the following amount:

Full-time study \$75.00 Part-time study 40.00

After the second Saturday after the first day of classes in the term, the above amount is retained plus an additional percentage of the remaining tuition (as indicated in the schedule on page 54) for each week, or part of a week, of the term up to the date on which the student's written notice of withdrawal is received by the Office of Student Information Services. A student's financial assistance is adjusted to reflect reductions in the student's overall budget. Excess financial aid is restored proportionally to the funds from which it was drawn before a refund is given.

# APPLICATION OR RENEWAL OF APPLICATION FOR A DEGREE

Degrees are awarded three times a year—in October, January, and May. A candidate for any Columbia degree (except the doctoral degree) must file an application with the Office of Student Information Services, 630 West 168th Street. In the 1985–1986 academic year, the last day to file for an October degree is August 1; for a January degree, November 1; and for a May degree, February 17. A late fee of \$50 will be charged after these

#### Adjustment Schedule

	MINIMUM TUITION RETAINED	PERCENTAGE OF REMAINING TUITION RETAINED
Up to and including dates		
specified above	\$40 or \$75	0
Following week	40 or 75	10
Second following week	40 or 75	20
Third following week	40 or 75	30
Fourth following week	40 or 75	45
Fifth following week	40 or 75	60
Sixth following week	40 or 75	75
Seventh following week	40 or 75	90
Eighth following week	40 or 75	100 (no adjustment)

dates and until the expiration of the *late* filing period for each conferral date (September 5 for October degrees, December 6 for January degrees, April 1 for May degrees). Applications received *after* the late filing period will automatically be applied to the next conferral date.

If the student fails to earn the degree by the conferral date for which he or she has made application, the student may renew the application. A \$50 late fee will be charged for late filing of renewals of application according to the same schedule as for original applications (see above).

## REQUESTS FOR TRANSCRIPTS

The Family Educational Rights and Privacy Act of 1974 as amended prohibits the release of educational records by institutions without the specific written consent of the student or alumnus. Students or alumni may request copies of their records by writing to the Office of Student Information Services, 630 West 168th Street, New York, N.Y. 10032. Official copies will be sent directly by the University only to an official address

such as another university, a business firm, or government agency. However students or alumni may request that unofficial copies of their transcripts (stamped "Student Copy") be sent directly to them.

There is a charge of \$5 a copy for each transcript requested or \$5 for the first copy plus \$1 for each additional copy when requested at the same time. A maximum of \$20 is charged for fifteen or more transcripts ordered at one time. There is no charge for intrauniversity copies sent between University offices. Transcript requests are processed in the order received and require five to seven working days for processing. Specific deadlines should be mentioned, and checks accompanying requests should be made payable to Columbia University.

#### ESTIMATED EXPENSES

Estimated expenses for full-time students are outlined below. Tuition for part-time students will be approximately \$326 a point; part-time students are encouraged to participate in the health and hospital plans.

#### University Expenses (Per Year) (Subject to Change)

PHYSICAL THERAPY

	M.S. DEGREE PROGRAMS	
	FIRST YEAR	SECOND YEAR
Tuition: autumn and spring	\$9,792	\$7,178†
Summer clinical fee	12	_
Health and hospital fees	575	575
Books, uniforms, and supplies	1,250	650
Transportation to clinical courses*	50	350
Malpractice insurance	20	20
TOTAL	\$11,699	\$8,773

<sup>\*</sup>Expenses for summer clinical affiliations not included.

#### OCCUPATIONAL THERAPY

	M.S. DEGREE PROGRAMS	
	FIRST YEAR	SECOND YEAR
Tuition: autumn and spring	\$9,792	\$9,792
Summer clinical fee	12	12
Health and hospital fees	575	575
Books, uniforms, and supplies	525	575
Transportation to clinical courses*	86	125
Malpractice insurance	20	20
TOTAL	\$11,010	\$11,099

<sup>\*</sup>Expenses for summer clinical affiliations not included.

#### Living Expenses (Per Month)

	SINGLE STUDENT	MARRIED STUDENT
Room and board	\$585	\$ 920
Personal expenses	170	265
TOTAL	\$755	\$1,185

The monthly living expenses listed above represent an estimated cost of maintaining a modest but adequate standard of living during the 1985-1986 academic year. Living expenses during the summer clinical practice periods vary depending upon the accommodations provided by the facilities to which the student is assigned. It will be the student's responsibility to meet living expenses during the summer clinical practice periods.

In occupational therapy, fees for materials and equipment in laboratory classes are payable at the time of registration and are subject to change in accordance with market prices.

IMPORTANT NOTE: According to Treasury decision 6291, under Section 162 of the 1954 Internal Revenue Code, income tax deductions are allowed in many instances for tuition and other educational expenses. Stu-

<sup>†</sup>Based on 15-19 points autumn term and 7 points spring term.

dents are referred to the federal ruling on income tax deductions for teachers and other professional people seeking to maintain or improve skills required in their employment.

#### HOUSING

#### Health Sciences Campus

The University provides limited housing for graduate students who are regularly registered for an approved program of full-time academic work. Housing is coordinated through the Columbia University Health Sciences Central Housing Office, 50 Haven Avenue, New York, N.Y. 10032.

#### DORMITORIES

Rooms are usually for single occupancy and are furnished. A cafeteria, lounge areas, and recreational facilities, including a swimming pool, are available. Twenty-four-hour security service is provided.

#### APARTMENTS

154 Haven Avenue, N.Y.—Newly renovated building with furnished studio apartments, including kitchenette and bathroom. Security service currently provided from 6 p.m. to 8 a.m.

Bard Haven Tower I, 60 Haven Avenue, N.Y.—One- to three-bedroom apartments are available to students, with preference given to married students. Apartments are unfurnished and include complete kitchens. Fourteen-hour doorman service is provided.

Bard Haven Towers II and III, 100 Haven Avenue, N.Y—Adjacent and identical to Tower 1.

106 Haven Avenue—Six-story building with one- to two-bedroom unfurnished apartments. Apartments have full kitchens and bathrooms. No ele-

vator service and no security service are provided.

Detailed information on Universitymanaged housing, including specific locations and costs, together with a housing application, will be mailed to all students accepted into the Physical Therapy and Occupational Therapy programs, usually by the beginning of the summer.

#### OFF-CAMPUS APARTMENTS

In addition to Columbia University housing, off-campus accommodations are owned and operated by landlords other than the University and are not subject to inspection or approval by the University. The Central Housing Office maintains an inventory of off-campus apartments for a thirty-square-block area surrounding the Health Sciences campus.

Additional information on all of the above accommodations, as well as off-campus housing, may be obtained from the Health Sciences Central Housing Office, 50 Haven Avenue, New York, N.Y. 10032.

#### DINING SERVICES

#### Health Sciences Campus

Columbia University maintains dining services in Bard Hall open to all students on a cash basis or a prepaid voluntary board plan. The facility is open during the autumn and spring terms, Monday through Friday, excluding academic holidays. Private parties may be arranged through the Bard Hall Dining Service.

Meals are also available in the Presbyterian Hospital cafeteria every day of the year, including weekends and academic holidays, on a cash basis.

The University has no formal dining requirements, allowing students the flexibility of eating when and where they choose.

Board plan information may be obtained after July 1 from Dining Ser-

vices, 103 Johnson, Columbia University, New York, N.Y. 10027.

#### FINANCIAL AID

The financial aid program for the Programs in Physical Therapy and Occupational Therapy is designed to assist students who have demonstrated need to secure funds to help pay their education-related expenses. Demonstrated need is defined as the difference between anticipated expenses and financial resources.

Upon acceptance, students receive a financial aid policy statement which has been designed to achieve an equitable distribution of loan and scholarship funds. Students already enrolled are informed during the spring term about policies for the coming academic year. Applicants are required to borrow the maximum permissible amount of guaranteed student loan at the beginning of each academic year before becoming eligible for aid administered by the University.

The Programs in Physical Therapy and Occupational Therapy are participants in the Graduate and Professional School Financial Aid Service (GAPSFAS), a federally approved needs analysis service. All financial aid applicants must complete a GAPSFAS application, which is mailed to the student together with his or her letter of acceptance. Both student and parents complete this form and forward it to GAPSFAS, Princeton, New Jersey. On the basis of the information received, a financial analysis is prepared and sent to the Financial Aid Officer with a determination of the applicant's resources for educational purposes. After taking these resources, loans, and outside scholarships into consideration, awards are made by the University based on a student's "remaining need." This assistance, based on verified need, is intended to supplement, rather than substitute for, the student's resources and parental contribution.

#### Loans

Loans available to graduate students are provided by various sources, including the federal and state governments, the University, and private agencies, as outlined in "Other Sources of Financial Aid."

FEDERAL AND STATE GUARANTEED LOANS

The guaranteed student loan is a federally approved program that makes low-interest loans available to students with demonstrated need to help meet their educational expenses. Currently, the maximum loan for full-time graduate students under this program is \$5,000 per academic year, and the total outstanding loan balance at any one time—undergraduate plus graduate—may not exceed \$25,000. Half-time students (registered for a minimum of 6 points per term) may apply for loans up to a maximum of \$2,500 per academic vear.

Under present Congressional legislation, students are automatically eligible for a guaranteed student loan if the family's adjusted gross income is less than \$30,000. If the family's adjusted gross income is between \$30,000 and \$75,000, a needs test must be met to determine if there is "remaining need" after all other sources of financial aid have been taken into consideration. Those with incomes in excess of \$75,000 can only demonstrate need through a GAPSFAS analysis.

Loan repayment is deferred while the student is in school and for a specified grace period after studies have been discontinued. The federal government will pay the interest on the loan while the student is in school and during the grace period. Interest for those who are first-time borrowers is 8 percent, with a 6-month grace period prior to repayment. For students who currently have a 7 or 9 percent GSL, the interest rate on additional GSLs will continue to be 7 or 9 percent. Loan repayment begins 6 months after a students leaves school for a 9 percent loan; 9 months later for a 7 percent loan.

Applications are usually available from participating lending institutions in the student's state of resi-

dence.

#### NATIONAL DIRECT STUDENT LOANS

The NDSL program is funded from federal sources and collections from prior loans. Individual schools are responsible for determining both the recipients of such funds and the amounts to be awarded. Currently, loans are awarded only to eligible full-time students. The aggregate amount of NDSL funds a graduate student may receive from all undergraduate and graduate instruction is \$12,000. The current interest rate, payable during the repayment period, is 5 percent on the unpaid principal. Repayment begins six months after graduation or after leaving school. The repayment period may be extended up to ten years.

## AUXILIARY LOANS TO ASSIST STUDENTS (ALAS/PLUS)

The ALAS/PLUS loan is a federally insured loan program available to graduate students. Currently, both full-time and part-time students may borrow up to \$3,000 a year (not exceeding "remaining educational need") at 12 percent interest; up to \$15,000 in the aggregate. An income test is not required. Full-time students must make interest payments while they are in school; part-time students, in addition to making interest payments while in school, must also begin repayment of principal.

If possible, applications should be requested from the same bank as for the guaranteed student loan, particularly for students who live in New York State.

#### Scholarships

Students are urged to determine the availability of scholarship assistance from the states in which they reside and to make application for such funds when appropriate. In New York State, residents may be eligible to apply for an award ranging from \$100 to \$600 per academic year under the New York State Tuition Assistance Program. Detailed information and applications can be obtained from the Higher Education Services Corporation, Office of Grants and Awards, Tower Building, Empire State Plaza, Albany, New York 12255. The School Code Number is 5489.

A limited number of scholarships are awarded annually from University funds to full-time students, the amounts varying from year to year, depending upon the availability of funds and student need. Applicants do not apply for these funds directly, but follow the procedures detailed in their acceptance packets. No other forms are necessary.

#### Federally Supported College Work-Study Program

Under this program, students who show financial need are eligible to earn money through the College Work-Study Program (CWS) to help pay part of their educational expenses. Maximum earnings are assigned as part of the financial aid package. Students may apply for work at the University during the academic year. First-year students may apply for work-study during the summer preceding entry into the program. Interested students should contact the Financial Aid Office for further information.

#### Other Sources of Financial Aid

A limited number of scholarships are available in Occupational Therapy and Physical Therapy by direct application to the agencies concerned:

The National Association of Business Clubs, P.O. Box 5127, High Point, North Carolina 27262. Awards are made to students training in various fields of corrective therapy including occupational therapy and physical therapy.

The Schechter Foundation, c/o Paco Pharmaceutical Services, Inc., 535 Madison Avenue, New York, N.Y. 10022. Scholarship awards.

Paul C. Rodenhauser, Grand Recorder/Secretary, Knights Templar Educational Foundation, 14 East Jackson Boulevard, Suite 1700, Chicago, Illinois 60604. Student loans at 5 percent interest.

Jewish Foundation for Education of Women, 120 West 57th Street, New York, N.Y. 10019. Scholarships and/ or loans.

Hattie M. Strong Foundation, Inc., Suite 409, Cafritz Building, 1625 I Street, N.W., Washington, D.C. 20006. Interest-free loans.

American Mensa Education and Research Foundation, 1701 West 3rd Street, Brooklyn, N.Y. 11223. Scholarship awards.

Career Advancement Scholarships (for women over 25)/Clairol Loving Care Scholarships (for women over 30), The Business and Professional Women's Foundation, 2012 Massachusetts Avenue, N.W., Washington, D.C. 20036.

The American Occupational Therapy Foundation, Inc., 6000 Executive Boulevard, Suite 200, Wilco Building, Rockville, Maryland 20852. Scholarship awards.

New York State Occupational Therapy Scholarship. To be applied for in conjunction with the Occupational Therapy Faculty at Columbia University during the spring term of student's first year.

General Federation of Women's Clubs. Contact the Women's Club in your community.

Students are encouraged to seek funds from other private foundations, local service associations, and organizations known personally to the student. It may also be useful to consult The Foundation Center Library, 888 Seventh Avenue, N.Y. 10019, for additional references.

#### STUDENT EMPLOYMENT

A student interested in earning part of his or her expenses by working part time during the academic year, or either part or full time during the summer, should apply to the Office of Student Employment, 206 Lewisohn (on the Morningside campus). The facilities of the Office are available to all registered students of the University, staff members, and husbands and wives of students.

#### Wives and Husbands of Students

Wives and husbands of students may register with the Office of Student Employment for term-time work. Those who are interested in full-time jobs on the campus should contact the University Personnel Office, 209 Dodge. Most of these jobs are clerical or secretarial in nature, usually requiring some typing and, in some instances, stenography as well. Regular full-time University employees are eligible for a limited number of points of tuition exemption provided they meet the stated requirements of the Supporting Staff Plan (a copy of which

may be obtained from the University Personnel Office, 313 Dodge), as well as the admission requirements of the school or division in which they wish to enroll. Tuition-exempt courses are taken primarily in evening classes in the School of General Studies.

#### STUDENT ACTIVITIES

The facilities of the Morningside and Health Sciences campuses are available to physical therapy and occupational therapy students for their intellectual and recreational enrichment.

#### Academic Calendar, 1985-1986

## MAJOR RELIGIOUS HOLIDAYS

For a statement of University policy regarding religious holidays, see *Registration and Expenses*—Religious Holidays.

Some of the major holidays occurring on weekdays are listed below. The Jewish holy days begin at sundown of the preceding day.

Rosh Hashanah Monday, Tuesday, September 16, 17

Yom Kippur Wednesday, September 25

First days of Succoth Monday, Tuesday, September 30, October 1

Concluding days of Succoth Monday, Tuesday, October 7, 8

Good Friday Friday, March 28

First days of Passover Thursday, Friday, April 24, 25

Concluding days of Passover Wednesday, Thursday, April 30, May 1

*Id al Fitr*Not yet announced

*Id al Adha* Not yet announced

#### AUTUMN TERM, 1985

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August

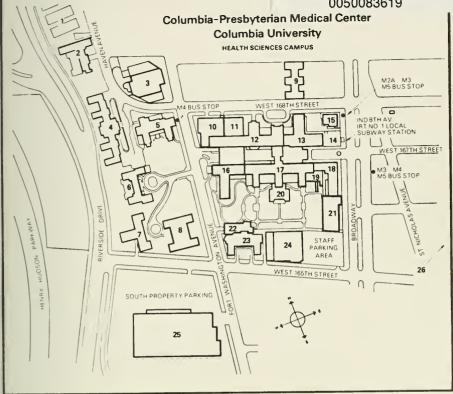
Thursday. Last day to apply or reapply for October degrees and certificates (see September 5). A *late fee* must be paid by students who apply or reapply after this date for degrees and certificates to be awarded in October.

September	3	Tuesday. Registration.
	5	Thursday. Classes begin. Late registration begins. Last day to file <i>late</i> application or renewal of application for October degrees. Applications received after this date will automatically be applied to the next conferral date. A <i>late fee</i> must be paid by students allowed to register after this date.
	9	Monday. First day to change programs and apply to audit courses.
	13	Friday. Last day to change programs and apply to audit courses. No adjustment of fees for individual courses dropped after this date.
October	23	Wednesday. Award of October degrees.
November	1	Friday. Last day to apply or reapply for January degrees (see December 6). A <i>late fee</i> must be paid by students who apply or reapply after this date for all degrees to be awarded in Jan-
		uary.
	4	
	4 5	uary.
		Monday. Academic holiday.
	5	Monday. Academic holiday.  Tuesday. Election Day. Holiday.  Thursday. Last day to drop individual
December	5	Monday. Academic holiday.  Tuesday. Election Day. Holiday.  Thursday. Last day to drop individual courses.  Thursday, through December 1,
December	5 14 28	Monday. Academic holiday.  Tuesday. Election Day. Holiday.  Thursday. Last day to drop individual courses.  Thursday, through December 1, Sunday. Thanksgiving holidays.  Friday. Last day to file late application or renewal of application for January degrees. Applications received after this date will automatically be

	13-20	Friday–Friday. Midyear course examinations. Term ends.
	21	Saturday, through January 14, 1986, Tuesday. Winter holidays.
SPRING TER	М, 1986	
January	17	Friday. Registration. A <i>late fee</i> must be paid by students allowed to register after this date.
	20	Monday. Classes begin.
	22	Wednesday. Award of January degrees and certificates.
	23	Thursday. First day to change programs and apply to audit courses.
	29	Wednesday. Last day to change programs and apply to audit courses. No adjustment of fees for individual courses dropped after this date.
February	17	Monday. Washington's Birthday. Academic holiday.
	17	Monday. Last day to apply or reapply for May degrees (see April 1). A late fee must be paid by students who apply or reapply after this date for all degrees to be awarded in May.
March	2	Sunday. Annual Commemoration Service in St. Paul's Chapel.
	9-16	Sunday-Sunday. Spring holidays.
	20	Thursday. Last day to drop individual courses.
April	1	Tuesday. Last day to file <i>late</i> application or renewal of application for May degrees. Applications received after this date will automatically be applied to the next conferral date.

64 ACADEMI	C CALENDAR	
May	1	Thursday. Study day.
	2–9	Friday-Friday. Final course examinations. Term ends.
	7	Tuesday. Registration for the Summer Session.
COMMENCE	EMENT, 1986	
May	11	Sunday. Baccalaureate Service.
	14	Wednesday. Conferring of degrees and certificates.





- 11 Alumni Auditorium
- 3 Augustus Long Library
- 8 Dana W Atchley Pavilion
- 18 The Babies Hospilal
- 21 Babies Hospital Research, Teaching, and Office
  - 2 Bard Hall Medical Student
  - 1 Bard Haven Towers
- 10 William Black Medical
- 3 Cancer Center/Institute of Cancer Research
- 24 Central Service Building
- 12 College of Physicians and
- 26 Center for Community Health Systems

- 13 School of Dental and Oral Surgery
- 9 Georgian Nurses Residence
- 22 Edward S Harkness Eye Institute
- 23 Eye Institute Research
- Laboratories
- 7 Harkness Memorial Hall
- 16 Harkness Pavilion
- 20 Pauline A Hartford Memorial Chapel
  - 3 Julius and Armand Hammer Health Sciences Center
  - 3 Institute of Human Nutrition
- 2/12 International Institute for the Study of Hurnan Reproduction

- 6 Anna C. Maxwell Hall, School of Nursing Residence
- 5 The Neurological Institute of New York
- 6 School of Nursing
- 25 Parking facilities
- 17 Presbyterian Hospital New York Orthopedic Hospital Stoane Hospital for Women

Squier Urological Clinic

- 4 New York State Psychiatric Institute
- 4 Psychoanalytic Center
- 15 School of Public Health
- 19 Radiotherapy Center
- 13 Vanderbilt Clinic
- 14 Vanderbilt Clinic Addition

